

# Valves Brochure





## Leading Manufacturer of Full Ranges Valves at Industrial Field

Antiwear Group, as a leading valve manufacturer, supplies full ranges of industrial valves: ball valve, butterfly valve, plug valve, gate valve, globe valve, check valve, piston valve, regulating valve, rotating disc valve and so on, which are widely used in refinery, oil & gas, power generation, water treatment, petrochemical, urban construction, paper & pulp, pipeline transferring and other field. The performance of above valves supplied by Antiwear is appreciated by more and more end users worldwide, in both normal and severe applications.

Antiwear DO TRUST being honest is not only a character but also a life and working attitude. With rapid developing, "It's reliable" has become a gene of Antiwear Group, which means reliable product, reliable people and reliable service. Antiwear Group has entire QA/QC system & certifications, and has got approval of many certifications such as ISO 9001, ISO14000, ISO18000, TS, API6D, API607, ISO15848, PED, API6A, etc.

The workshops of Antiwear Group are located in Suzhou, Wenzhou and Shanghai of China. Moreover Antiwear has localized warehousing, sales and distributing system worldwide. Quick response upon request of customers is achieved by Internet+ production and APP system. Final target of Antiwear is to help customers enjoy good life.

## Continuing Optimized Proposal

Antiwear keeps on optimizing proposals in order to improve total quality and reliability of supplied valves. Besides normal applications, Antiwear does a lot of researches on critical service including high pressure, high temperature, high frequency operating, multi-phases medium, erosive medium, corrosive medium, crystallized medium and other special requests in all industries especially at silicon industry, coal gasification, petrochemical, hydrometallurgical industry, etc. Through plenty of experiments and experiences, Antiwear's proposals in above field have been proved to be one of the best in the world.

- High pressure and high temperature at ultra-purity oxygen or hydrogen service---Ball valve, Globe valve, Check valve;
- Solid abrasive medium block and bleed service---Metal seated ball valve, Rotating disc valve, Twin-Disc valve, Eccentric half-ball valve;

- High temperature exceeding 450°C service---Ball valve, Rotating disc valve, Gate valve
- Annual operating cycles reaching 1.6 million at PP/PE PSD service---High frequency PSD metal and soft seated ball valve
- Solid abrasive particles at high pressure differential bleeding and regulating service---Sliding plate valve, Butterfly valve
- Corrosive service---Ball valve, Plug valve

- Fiber medium and Pulp service---Eccentric half-ball valve
- Erosion, flash evaporating and cavitation service---Angle regulating valve
- Zero-leakage request with gas medium at large pipe size---Triple-eccentric butterfly valve
- Ore pulp service---Y-style globe valve, Regulating angle valve
- Crystallized medium service---Plug valve, Eccentric half-ball valve
- Precipitant medium service---Piston valve

### Total solution

- All valves
- All industries
- All applications
- Customized optional products
- Excellent quality in severe applications
- Plenty of testing and experiences depending upon results of Research & Design

### Best quality

- 100% parts inspection
- 100% product testing
- 100% supplier qualified
- 100% process traceable
- Advanced processing machine and testing equipment
- Entire QA/QC system & certifications

## Five Advantages of Antiwear

### Quick response

- Response upon requests within 24 hours
- Localized warehousing worldwide
- Global sales and distributors
- Easy Inquiry & Quotation through APP software
- Order information "bar code" inquiry system
- Abnormal order information issued forwardly

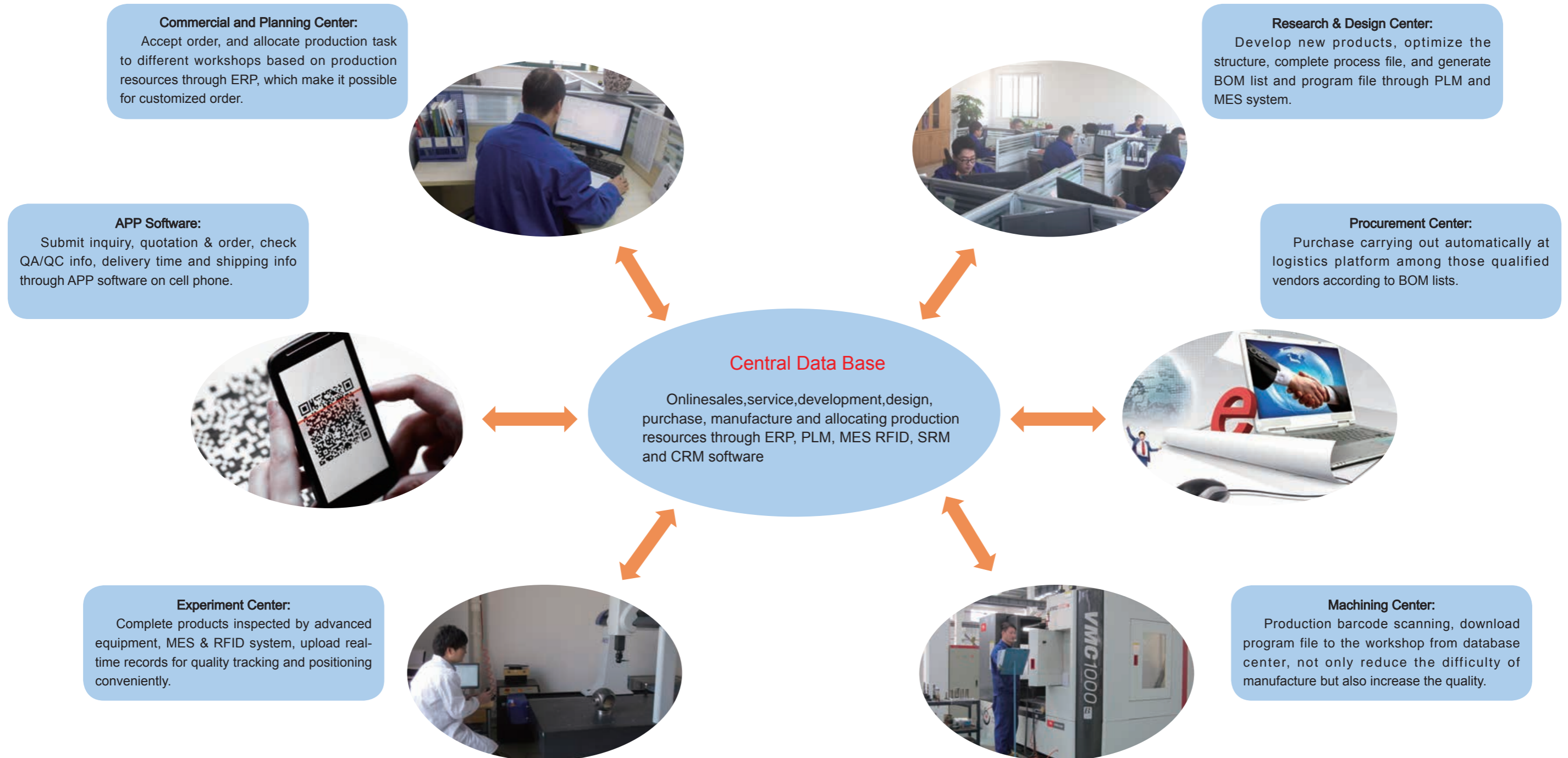
### Internet+ production

- Online sales and service
- Personalized and customized
- Professional intelligent small factory
- Online development, design, purchase and manufacture

### Enterprise gene: It's Reliable

- Reliable product
- Reliable people
- Reliable service
- Help you enjoy good life

# In ternet+P roduction





### Research & Design System :

Since Antiwear was founded, Antiwear has been dedicated in R&D to deal with the end user's request including normal and critical applications. Annually Antiwear spends more than 10% of its sales volume on R&D. Continuing investment on R&D generates lots of patents, new solutions and even new products to meet the customer's requests. All solutions and products are highly appreciated by more and more end users.

Standard and modularized design is used to ensure parts exchangeable. Three-dimensional simulating and finite element analysis is also applied for new product designing. Moreover hi-tech simulating and evaluating must be done before mass producing in order to ensure reliability and stability of new products.

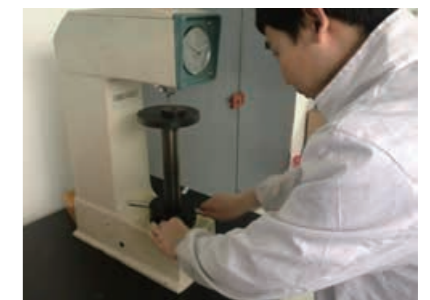
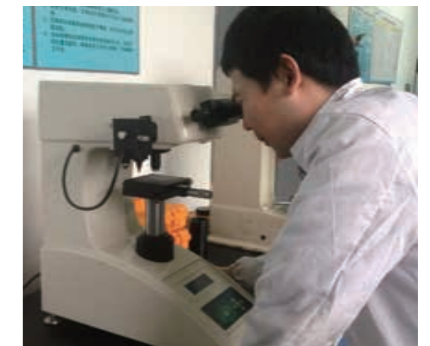
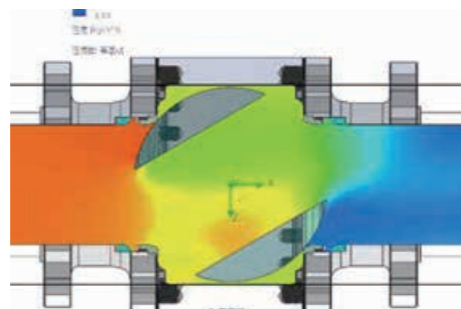
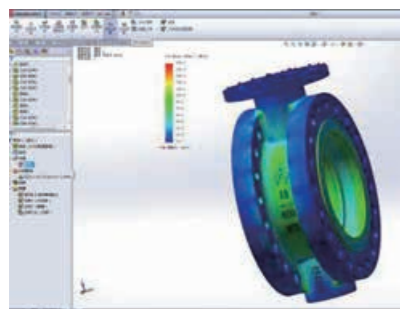
Antiwear encourages its designers and workers to improve their ability with innovative thinking. As a result, an aggressive team consisting of experienced engineers and technicians has become Antiwear's core force. Antiwear DO TRUST creativity and initiative spirit BE the basis of development for a reputable enterprise.

### QA/QC System :

Antiwear believes quality is vitality for an enterprise. At Antiwear's each workshop all parts machining status and process data can be recorded and controlled by ERP and MES software to make sure 100% parts traceable.

Antiwear has established a full functional physics & chemistry laboratory with many advanced equipment including roundness measuring equipment, metalchroma-tograph, multi-function mechanical testing instrument, three-coordinates measuring machine, Rockwell & Vickers hardness tester, ultrasonic flaw-detecting machine, ultra-sonic thickness meter, torque tester, automatic pressure testing machine and so on.

Antiwear has a professional QA/QC team to ensure supplied products can meet each customer's request with many international standards such as ASME, API, ISO, PED, etc. With plenty of experiences, Antiwear gets used to offering a better or longer guarantee than any other suppliers in the world. Final target of QA/QC system is to help customers enjoy good life.



Patent



Certificate



ISO9001



API607



ISO15848



API6D

APP quick response

APP software developed by Antiwear can offer a quick response within 24 hours upon the customer's request. Through the software customers can easily complete inquiry, quotation, contract details confirmation, etc. Moreover the customer can also check order scheduling, quality info, shipping date and information through barcoding system.

Global sales and distributing system

Antiwear has got a good reputation due to its good products quality and enterprise culture. In order to serve the customer quickly, easily and efficiently, Antiwear has established a sales and distributors system worldwide. Antiwear hopes that the group can help each customer enjoy good life through its effort.

Localized warehousing worldwide

In order to meet the customer's delivery time request Antiwear has established a global warehousing system in which some normal parts even entire valves are in regular stock. And if customers are in urgent need of some valves, Antiwear will do best to meet request.



ISO14001



OHSAS18001



PED



TS



# Products

## ➤ BALL VALVES P 11-P 16

- Soft seated Ball Valve
- Metal seated Ball Valve
- High Temperature Ball Valve
- Cryogenic Ball Valve
- Three-way Ball Valve
- Four-way Ball Valve
- Fully-Welded Ball Valve
- Top Entry Ball Valve
- Metal Seated Oxygen Service Ball Valve
- High Frequency Ball Valve
- Eccentric Half-ball Valve



## ➤ BUTTERFLY VALVES P 16-P 18

- Center Rubber Lined Butterfly Valve
- Full Lined Butterfly Valve
- Single-eccentric Butterfly Valve
- Double-eccentric Butterfly Valve
- Triple-eccentric Butterfly Valve



## ➤ GATE VALVES P 19-P 20

- Flat Gate Valve
- Wedge Gate Valve
- Knife Gate Valve



## ➤ GLOBE VALVES P 20-P 22

- Straight-through Globe Valve
- Y-Pattern Globe Valve
- Angle Pattern Globe Valve
- Bellows sealed Globe Valve



## ➤ CHECK VALVES P 22-P 24

- Swing Check Valve
- Lift Check Valve
- Dual Plate Check Valve
- Slow Closure Check Valve



## ➤ PLUG VALVES P 24-P 25

- Soft seated Plug Valve
- Lubricated Plug Valve
- Lifting Plug Valve



## ➤ SPECIAL VALVES P 26-P 28

- Rotating Disc Valve
- Twin-disc Valve
- Slide Plate Valve
- Angle Regulating Valve;
- High-frequency Blow-Back Cleaning Valve
- Piston Valve



**BALL VALVES**

**Soft Seated Ball Valve**

**Design Features:**

- Pointed seat design according to working condition
- Middle flange quantitative compression
- Blow-out proof valve stem
- Reliable internal and external leakage sealing
- Double-block and bleed function
- Fire proof and anti-static design
- Urgent grease seal optional
- Spring pre-loaded structure optional

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 1/2"~48" (DN15~DN1200)
- Working Temperature: -46°C ~300°C
- Body Material: A105/WCB, F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M F51/4A,F53/5A,Incoloy,Hastelloy, 904L,Ti,Zr,other material optional
- Core Material: A105/WCB, F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,Ti,Zr,other material optional
- Seat Material: PTFE,RPTFE,PEEK,NYLON,DEVLON, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**Metal Seated Ball Valve**

**Design Features:**

- Reliable hard sealing surface coatings
- Middle flange quantitative compression
- Blow-out proof valve stem
- Double bearing design
- Optimized Belleville spring design for wear compensation
- Live-loaded spring design
- Reliable internal and external leakage sealing
- Fire proof and anti-static design
- Pressure self-relief design of valve pocket

**Product Range:**

- Pressure Rating: CLASS150~CLASS2500(PN10~PN420)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature:-46°C ~425°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M, F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: SS,410,Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**BALL VALVES**

**High Temperature Ball Valve**

**Design Features:**

- Good internal and external sealing performance under high temperature condition
- Middle flange quantitative compression
- Pointed hard sealing surface coatings for high temperature condition
- Double bearings design
- Anti-jam design
- Blow-out proof design
- Extended stem design
- Live-loaded spring design

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: 425°C ~650°C
- Body Material: F304H,F316H,Incoloy800H,other material optional
- Core Material: F304H,F316H,310S,Incoloy800H,other material optional
- Seat Material: Fslloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**Cryogenic Ball Valve**

**Design Features:**

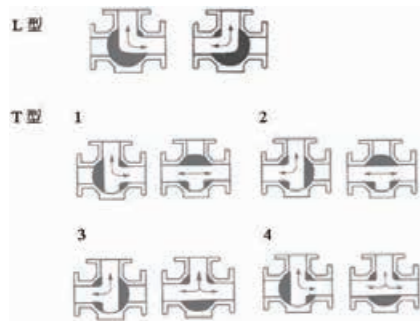
- Excellent internal and external sealing performance under deep low temperature condition
- Strict cryogenic treatment
- Middle flange quantitative compression
- Blow-out proof valve stem
- Extended stem design
- Pressure self-relief design of valve pocket
- Fire proof and anti-static design
- Live-loaded spring design

**Product Range:**

- Pressure Rating: CLASS150~CLASS900 (PN10~PN160)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: -196°C ~-46°C
- Body Material: F304/CF8,F316/CF8M,other material optional
- Core Material: F304,F316,other material optional
- Seat Material: PTFE,RPTFE,PCTFE,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator, Hydraulic actuator



**BALL VALVES**



**Three-way ball valve**

**Design Features:**

- L-Type and T-Type design optional
- Reliable sealing performance & smooth flow path
- Long cycle life, big Cv, small flow resistance
- Blow-out proof valve stem
- Pressure self-relief design of valve pocket
- Live-loaded spring design
- Soft & metal-seated optional

**Product Range:**

- Pressure Rating: CLASS150~CLASS900 (PN10~PN160)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196℃ ~650℃
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,PEEK,NYLON,Devlon,SS, 410,Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Four-way ball**

**Design Features:**

- Bi-directional medium switching, replacing four ball valves
- Reliable sealing performance & smooth flow path
- Long cycle life, big Cv, small flow resistance
- Pressure self-relief design of valve pocket
- Blow-out proof valve stem
- Live-loaded spring design

**Product Range:**

- Pressure Rating: CLASS150~CLASS900 (PN10~PN160)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196℃ ~650℃
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,PEEK,NYLON,Devlon,SS,410, Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**BALL VALVES**



**Fully-W e lded ball valve**

**Design Features:**

- Valve bonnet and body overall welding
- Pressure self-relief design of valve pocket
- Strict nondestructive flaw detection
- Double-block and bleed function
- Blow-out proof valve stem
- Fire proof and anti-static design
- Urgent grease seal optional
- Extended valve stem for buried install optional
- Soft & metal seated or reduced bore optional

**Product Range:**

- Pressure Rating:CLASS 150~CLASS2500 (PN10~PN420)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: -46℃ ~425℃
- Body Material: A105/WCB,F304/CF8,F316/CF8M,other material optional
- Core Material: A105/WCB,F6a,F304/CF8,F316/CF8M, other material optional
- Seat Material: PTFE,RPTFE,PEEK,NYLON,Devlon,SS, 410,Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Top Entry Ball Valve**

**Design Features:**

- Maintainable and spare parts replaceable on line
- Double-block and bleed function
- Blow-out proof valve stem
- Pressure self-relief design of valve pocket
- Fire proof and anti-static design
- Urgent grease seal optional
- Soft & metal seated optional

**Product Range:**

- Pressure Rating: CLASS 150~CLASS1500 (PN10~PN260)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -46℃ ~425℃
- Body Material: A105/WCB,F304/CF8,F316/CF8M,other material optional
- Core Material: A105/WCB,F6a,F304/CF8,F316/CF8M,other material optional
- Seat Material: PTFE,RPTFE,PEEK,NYLON,Devlon,SS,410, Stellite6,Fsloy other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



## BALL VALVES



### Metal Seated Oxygen Service Ball Valve

**Design Features:**

- Segmental bearing design to make stem free of side force
- Strict degreasing and de-oiling process
- Peeling-proof oil-less graphite
- Pointed metal sealing surface coating for ultra-pure gas medium
- Middle flange quantitative compression
- Live-loaded spring design
- Anti-jam design
- Fire proof and anti-static design

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: -46°C ~500°C
- Body Material: F304, F316, Monel, Inconel, Incoloy, other material optional
- Core Material: F304, F316, Monel, Inconel, Incoloy, other material optional
- Seat Material: Fslloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic Actuator

### High Frequency Ball Valve

**Design Features:**

- Up to 3 million cycles dry friction on/off operating
- Middle flange quantitative compression
- Optimized Belleville spring design for wear compensation
- Pointed hard sealing surface coatings for high frequency operating
- Multiple positioning stem housing design to prevent decline
- Multiple combined packing
- Self-tightening bearing bore design for compensation of wear, pressure and temperature
- Live-loaded spring design
- Tailormade high frequency pneumatic actuator

**Product Range:**

- Pressure Rating: CLASS150~CLASS900 (PN10~PN160)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: -46°C ~425°C
- Body Material: A105/WCB, F316/CF8M, other material optional
- Core Material: F304, F316, F51, other material optional
- Seat Material: Fslloy, other material optional
- Operating Mode: Pneumatic actuator



## BALL VALVES



### Eccentric half-ball Valve

**Design Features:**

- Quick opening and closing with low flow resistance
- Simple flow path, big Cv, good self-cleaning ability
- Self-compensation of wear and fouling
- Reliable sealing & long cycle life
- Blow-out proof valve stem & double bearing design
- Fire proof and anti-static design
- Reduced bore optional

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB, F11/WC6, F22/WC9, LF2/LCB, F304/CF8, F316/CF8M, F51/4A, F53/5A, Inconel, Monel, Incoloy, Hastelloy, 904L, other material optional
- Core Material: A105/WCB, F11/WC6, F22/WC9, LF2/LCB, F304/CF8, F316/CF8M, F51/4A, F53/5A, F6a, 630, Inconel, Monel, Incoloy, Hastelloy, 904L, other material optional
- Seat Material: SS, 410, Stellite6, Fslloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator, Hydraulic actuator

### Center Rubber Lined Butterfly Valve

**Design Features:**

- Concentric design of body, stem and disc
- Compact structure and light weight
- Blow-out proof stem
- Bi-directional and big Cv
- Reliable internal and external sealing

**Product Range:**

- Pressure Rating: CLASS150~CLASS300 (PN10~PN50)
- Bore Size: 2" ~96" (DN50~DN2400)
- Working Temperature: -46°C ~200°C
- Body Material: A105/WCB, F11/WC6, F22/WC9, LF2/LCB, F304/CF8, F316/CF8M, F51/4A, F53/5A, Inconel, Monel, Incoloy, Hastelloy, 904L, other material optional
- Core Material: A105/WCB, F11/WC6, F22/WC9, LF2/LCB, F304/CF8, F316/CF8M, F51/4A, F53/5A, F6a, 630, Inconel, Monel, Incoloy, Hastelloy, 904L, other material optional
- Seat Material: EPDM, NBR, Viton, Silicone, PTFE, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator, Hydraulic actuator



**BUTTERFLY VALVES**



**Full lined butterfly valve**

**Design Features:**

- Concentric design of body, stem and disc
- Compact structure and light weight
- Corrosion-resistant
- Lining PTFE and full disc clad
- Reliable internal and external sealing

**Product Range:**

- Pressure Rating: CLASS150~CLASS300 (PN10~PN50)
- Bore Size: 2" ~96" (DN50~DN2400)
- Working Temperature: -46°C ~200°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,other material optional
- Core Material: PFA Coating,other material optional
- Seat Material: PTFE,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Single-eccentric Butterfly Valve**

**Design Features:**

- Eccentric between stem and disc
- Decrease extrusion between disc and seat
- Blow-out proof stem design
- Light weight and low torque
- Reliable internal and external sealing
- Big Cv

**Product Range:**

- Pressure Rating: CLASS150~CLASS300 (PN10~PN50)
- Bore Size: 2" ~96" (DN50~DN2400)
- Working Temperature: -46°C ~200°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: EPDM,NBR,Viton,Silicone,PTFE,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**BUTTERFLY VALVES**



**Double Eccentric Butterfly Valve**

**Design Features:**

- Double eccentric
- Decrease extrusion force between disc and seat
- Compact structure and light weight
- Blow-out proof stem
- Reliable internal and external sealing
- Soft & metal seated optional
- On/off or regulating function

**Product Range:**

- Pressure Rating: CLASS150~CLASS300 (PN10~PN50)
- Bore Size: 2" ~160" (DN50~DN4000)
- Working Temperature: -46°C ~ 300°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,SS,410,Stellite6,Stellite21, Fslloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Triple-eccentric Butterfly Valve**

**Design Features:**

- Sealed by torsion
- Triple eccentric with low friction torque
- Bi-directional flow with zero leakage
- High temperature service and cryogenic service valve optional
- Fire proof and anti-static design
- Soft and metal seated optional
- Blow-out proof stem design
- Low opening & closing torque

**Product Range:**

- Pressure Rating: CLASS150~ CLASS1500 (PN10~PN260)
- Bore Size: 2" ~160" (DN50~DN4000)
- Working Temperature: -196°C ~ 850°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,SS,410,Stellite6,Stellite21, Fslloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**GATE VALVES**



**Flat Gate Valve**

**Design Features:**

- Bonnet pressure self-sealed design
- Fire proof design
- Extended stem optional
- Single or double flat gate optional
- Reliable internal and external sealing
- Pressure self-relief design of valve pocket
- Elastic gate design

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Wedge Gate Valve**

**Design Features:**

- Bonnet pressure self-sealed design
- Fire proof design
- Extended stem optional
- Single or double flat gate optional
- Reliable internal and external sealing
- Pressure self-relief design of valve pocket
- Full stroke sleeve guide design
- Different wedges optional

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: SS,410,Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**GATE VALVES**



**Knife Gate Valve**

**Design Features:**

- Full bore design
- Low flow resistance and easy to repair
- Bi-directional flow
- Corrosion resisting
- Soft and metal seated optional

**Product Range:**

- Pressure Rating: CLASS150~ CLASS300 (PN10~PN50)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -46°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode:Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Straight-through Globe Valve**

**Design Features:**

- Different types of disc optional
- Extended stem optional
- Long cycle life with low friction force
- Fire proof design
- Soft & metal seated optional
- Throttling and regulating functional
- Reliable internal and external sealing

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size: 1/2" ~24" (DN15~DN600)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel,Incoloy, Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**GLOBE VALVES**



**Y-Pattern Globe Valve**

**Design Features:**

- Stem is leaned to flow path
- Straight flow path without any medium direction changes
- Different types of disc optional
- Extended stem optional
- Long cycle life with low friction force
- Fire proof design
- Soft & metal seated optional
- Throttling and regulating functional

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size: 1/2" ~24" (DN15~DN600)
- Working Temperature: -46°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel,Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode:Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Angle Globe Valve**

**Design Features:**

- Inlet port is vertical to outlet port
- Different types of disc optional
- Extended stem optional
- Long cycle life with low friction force
- Fire proof design
- Soft & metal seated optional
- Throttling and regulating functional

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size:1/ 2" ~24" (DN15~DN600)
- Working Temperature:-196°C ~650°C
- Body Material:A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**GLOBE VALVES**



**Bellows Sealed Globe Valve**

**Design Features:**

- Bellows type stem with zero stem leakage
- Straight-through, Y-Pattern and angle pattern optional
- Different types of disc optional
- Long cycle life with low friction force
- Soft & metal seated optional
- Suitable for dangerous medium

**Product Range:**

- Pressure Rating: CLASS 150~ CLASS 2500 (PN10~PN420)
- Bore Size:1/2" ~24" (DN15~DN600)
- Working Temperature:-196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel,Incoloy, Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, othermaterial optional
- Operating Mode:Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Swing Check Valve**

**Design Features:**

- Swing type check valve
- Soft & metal seated optional
- Fire proof design
- Reliable internal and external sealing
- Single, double and special disc optional
- Compact structure and light weight

**Product Range:**

- Pressure Rating: CLASS 150~ CLASS 2500 (PN10~PN420)
- Bore Size: 1/2" ~48" (DN15~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel,Incoloy, Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: NBR,PTFE,RPTFE,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode: Automatic



**CHECK VALVES**

**Lift Check Valve**

**Design Features:**

- Lift type disc
- Soft & metal seated optional
- Fire proof design
- Reliable internal and external sealing
- Compact structure and light weight

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: NBR,PTFE,RPTFE,SS,410,Stellite6,Fsllloy, other material optional
- Operating Mode: Automatic



**CHECK VALVES**

**Subsured Check Valve**

**Design Features:**

- Decrease water hammer effect
- No operating noise and vibration
- Stream line design
- Short shut-off stroke
- Compact structure and light weight

**Product Range:**

- Pressure Rating: CLASS 150~ CLASS300 (PN10~PN50)
- Bore Size: 2" ~48" (DN50~DN1200)
- Working Temperature: -196°C ~650°C
- Body Material:A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:NBR,PTFE,RPTFE,SS,410,Stellite6,Fsllloy, other material optional
- Operating Mode:Automatic



**Dual Plate Check Valve**

**Design Features:**

- Dual plates disc design
- Spring-loaded disc
- Soft & metal seated optional
- Reliable internal and external sealing
- Compact structure and light weight

**Product Range:**

- Pressure Rating:CLASS150~ CLASS 2500 (PN10~PN420)
- Bore Size:2" ~48" (DN50~DN1200)
- Working Temperature:-196°C ~650°C
- Body Material:A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel,Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:NBR,PTFE,RPTFE,SS,410,Stellite6,Fsllloy, other material optional
- Operating Mode:Automatic



**Soft Seated Plug Valve**

**Design Features:**

- Different plugs optional
- Easy to repair
- No dead zone design
- Zero leakage
- Anti-static and fire proof design

**Product Range:**

- Pressure Rating: CLASS150~CLASS600(PN10~PN100)
- Bore Size: 1/2" ~24" (DN15~DN600)
- Working Temperature: -46°C ~300°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,Ti,Zr,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,Ti,Zr,other material optional
- Seat Material: PTFE,RPTFE,PEEK,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator



**PLUG VALVES**



**Lubricated Plug Valve**

**Design Features:**

- Lubricated seat with grease or oil
- Stellite welded seat with corrosion resisting
- Reliable internal and external sealing
- Compact structure and light weight
- No dead zone design

**Product Range:**

- Pressure Rating: CLASS150~ CLASS 1500(PN10~PN260)
- Bore Size: 1/2" ~24" (DN15~DN600)
- Working Temperature: -46°C ~300°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material:PTFE,RPTFE,PEEK,SS,410,Stellite6,Fsloy, other material optional
- Operating Mode:Lever, Worm & Gear, Pneumatic actuator, Electric actuator,Hydraulic actuator

**Lifting Plug Valve**

**Design Features:**

- Plug separated from seat while opening and closing at low torque
- Long cycle life due to no sealing surface friction during operating
- No lubricant
- Reliable internal and external sealing
- Compact structure and easy to repair

**Product Range:**

- Pressure Rating: CLASS150~CLASS2500(PN10~PN420)
- Bore Size:1/2" ~24" (DN15~DN600)
- Working Temperature:-46°C ~650°C
- Body Material:A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: SS,410,Stellite6,Fsloy,other material optional
- Operating Mode: Lever, Worm & Gear



**SPECIAL VALVES**

**Rotating Disc Valve**

**Design Features:**

- Self-rotating and self-milling disc
- Much longer cycle life with excellent sealing performance
- Pressure and thermal compensation by Belleville spring
- Perfect suitable to high pressure, high temperature or high frequency service
- Scraper disc design
- Reasonable purging ports optional for solid medium service
- SD/DD/LB/LD/LN/TW optional

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 1" ~48" (DN25~DN1200)
- Working Temperature: -196°C ~850°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: F304,F316,F51,F53,F6a,630,Inconel,Monel, Incoloy,Hastelloy,904L,Fsloy,other material optional
- Seat Material:Fsloy,other material optional
- Operating Mode: Pneumatic Actuator, Electric actuator, Hydraulic actuator



**Tw in-disc valve**

**Design Features:**

- Two single valves are combined into one body
- Self-rotating and self-milling disc
- Much longer cycle life with excellent sealing performance
- Pressure and thermal compensation by Belleville spring
- Excellent performance at high temperature service
- Scraper disc design
- Two single valves can be operated independently or one valve can be spare as another one's operating

**Product Range:**

- Pressure Rating: CLASS150~CLASS1500 (PN10~PN260)
- Bore Size: 4" ~24" (DN100~DN600)
- Working Temperature: -196°C ~850°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: F304,F316,F51,F53,F6a,630,Inconel,Monel, Incoloy,Hastelloy,904L,Fsloy,other material optional
- Seat Material:Fsloy,other material optional
- Operating Mode:Pneumatic actuator, Electric actuator, Hydraulic actuator



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**SPECIAL VALVES**

**Sliding plate valve**



**Design Features:**

- Broad sealing surface is protected
- Bi-directional path
- No dead zone design
- Pressure or flow regulating
- Different shapes of throttling plate optional
- Corrosion and erosion resistant
- Flow path inside lining design

**Product Range:**

- Pressure Rating: CLASS 150~CLASS1500 (PN10~PN260)
- Bore Size: 1/2" ~20" (DN15~DN500)
- Working Temperature: -196°C ~300°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,Ti,Zr,other material optional
- Core Material: F304,F316,F51,F53,F6a,630,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Seat Material: Fslloy,other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic Actuator, Electric actuator,Hydraulic actuator

**Angle regulating valve**

**Design Features:**

- 90 degree flow path
- Low vibration
- Corrosion and erosion resistant
- Pressure or flow regulating
- Flow path inside lining design

**Product Range:**

- Pressure Rating:CLASS 150~CLASS1500(PN10~PN260)
- Bore Size:2" ~16" (DN50~DN400)
- Working Temperature:-46°C ~300°C
- Body Material:A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: Fslloy,other material optional
- Seat Material: Fslloy,other material optional
- Operating Mode: Pneumatic actuator



**SPECIAL VALVES**

**High Frequency Blow-back Cleaning Valve**



**Design Features:**

- Quick Opening and closing
- Low vibration
- Excellent blow-back effect
- Reliable internal and external sealing
- Long cycle life with quick and easy operating
- Full stroke (close-open-close) time within 0.25 second

**Product Range:**

- Pressure Rating: CLASS 150~CLASS1500(PN10~PN260)
- Bore Size:2" ~6" (DN50~DN150)
- Working Temperature:-46°C ~300°C
- Body Material: A105/WCB,F304H,F316/CF8M,other material optional
- Core Material: 630,other material optional
- Seat Material:PEEK,PBI,other material optional
- Operating Mode:Pneumatic actuator

**Piston valve**

**Design Features:**

- Reliable sealing performance
- Low friction and long cycle life
- Dual-seal plunger optional
- Soft & metal seated optional
- Compact structure and easy to repair

**Product Range:**

- Pressure Rating: CLASS150~CLASS600(PN10~PN100)
- Bore Size: 1/2" ~24" (DN15~DN600)
- Working Temperature: -46°C ~425°C
- Body Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8, F316/CF8M,F51/4A,F53/5A,Inconel,Monel, Incoloy,Hastelloy,904L,other material optional
- Core Material: A105/WCB,F11/WC6,F22/WC9,LF2/LCB, F304/CF8,F316/CF8M,F51/4A,F53/5A,F6a,630,Inconel, Monel,Incoloy,Hastelloy,904L,other material optional
- Seat Material: PTFE,RPTFE,PEEK,SS,410,Stellite6,Fslloy, other material optional
- Operating Mode: Lever, Worm & Gear, Pneumatic actuator



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# ANTIWEAR VALVES

Antiwear enterprise culture—It's reliable  
 Core philosophy : Open, Reliable, Enterprising, Innovative

Open Reliable Enterprising Innovative

Open Reliable Enterprising Innovative



It's reliable

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