

Overview of NEWAY Facilities



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.

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.

Introduction of Foundries



As one of pressure-contained equipments in process control pipeline, valve castings' quality is most important for valve life, personnel safety and environment safety, especially for the high temperature and high pressure fields. So castings are always certified firstly by the strict customer before valve manufacturer are pre-qualified and approved as a qualify supplier.



Comparing with most of other competitors, Neway owns two self foundries: one is mainly to produce big size sand castings by organic ester water glass sand cast process, and other is mainly to produce small size investment castings by loss wax cast process. So we can provide 100% castings with different weight from 1kg up to 11000kg by ourselves, monthly produce capacity is up to 1200 ton. And each foundry is equipped with all kind of quality inspection facilities, such as: spectrum instrument, non-destructive test machinery, mechanical capability testing equipment and so on. So we can monitor the whole process of valve manufacture to ensure the valve quality, delivery, and competitive price, and to enable Neway remain a creditable supplier for every customer.



Technical Innovation

NEWAY technical research center utilizes the most advanced computer technology to improve the existing products and develop the new lines, this includes a highly educated and trained engineering team and a comprehensive internal computer network which links the entire operations of design, manufacturing and administration.

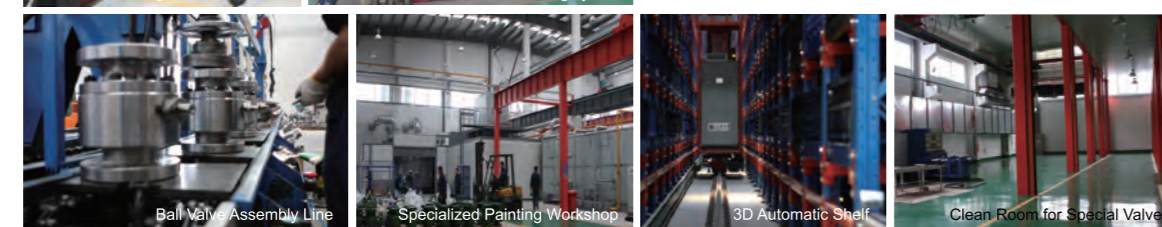
NEWAY design philosophy is to develop a safe and cost-efficient valve, we introduced the latest Ansys, Fe-safe, CF-design and NX software for all our new product design research which include the advanced finite element analysis to virtually verify the new design prior to production, this has resulted in dramatically reducing the new product design time and ensure 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.



Advanced Manufacturing

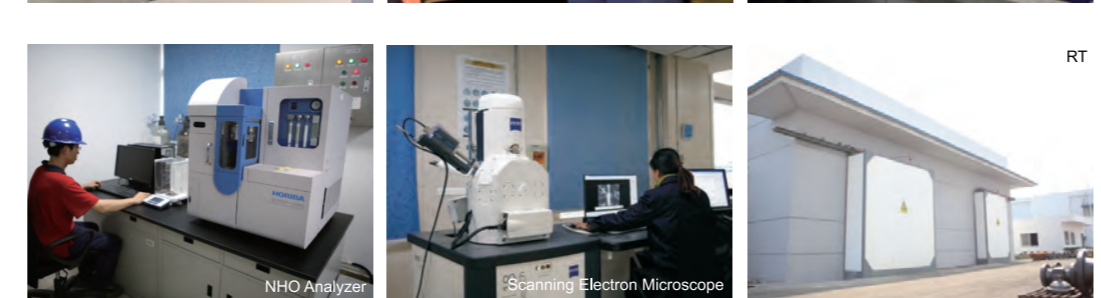


The latest computer technology are also widely applied in NEWAY for valve manufacturing, this includes a large number of numeric control machines (Machining center, CNC drilling machine) and ERP management system which significantly improve our machining quality and process control. NEWAY also employs a number of conventional lathe with capacity up to machine 64 " gate valve. NEWAY manufacturing philosophy is to ensure stable quality and just in time delivery.



Nuclear Valve Quality Control

NEWAY developed an extensive and advanced inspection and test facility to control the quality from rough castings or forgings to final products. These facilities enable us to do Radio graphic test, Ultra-sonic test, Dye-penetrant test, Magnetic test, Positive Material Identifier (PMI), Impact test, Tensile test, Hardness test, Fire safe test, Cryogenic test, Vacuum test, Low fugitive emission test, High pressure gas test, High temperature test and Hydro-static test.



Nuclear Valve Product Presentation

Nuclear Gate Valve

- Split Wedge Gate Valve
- Parallel Slide Gate Valve



Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Safety class	1, 2, 3, non-nuclear grade
Nominal diameter	≤600mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Welding, Flange
Type of actuate	Manual, Pneumatic, Electric
Material of the main body	Carbon steel, Alloy steel, Stainless steel
Structural type	Split(C-Type), Parallel(V/W-Type)

Structural feature:

- Body to bonnet connection can select bolted bonnet and pressure seal bonnet.
- Optional seal welding for screwed bonnet connection, sealing is more reliable and can realize the disassembling maintenance.
- Fully guided disc, hardfaced, wear-resistant for longer usage life.
- Stem with the form of packing seal, strict requirement to medium leakage, optional choose bellow and packing double sealing form, including metal bellow products are imported from Germany.
- To parallel slide gate valve, mechanical limit opening and closing position, precisely control the opening and closing position of wedge.

Nuclear Globe Valve

- T-Type Globe Valve
- Y-Type Globe Valve



Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

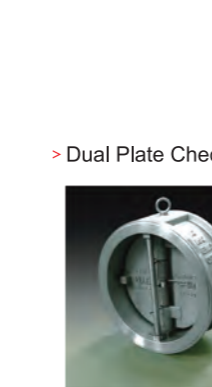
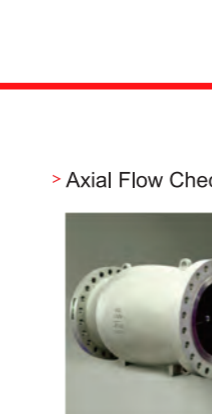
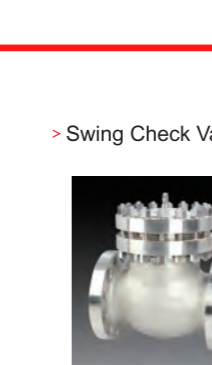
Safety class	1, 2, 3, non-nuclear grade
Nominal diameter	≤600mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Welding, Flange
Type of actuate	Manual, Pneumatic, Electric
Material of the main body	Carbon steel, Alloy steel, Stainless steel
Structural type	T-type, Y-type, Angle type, Z-type, 3 way type

Structural feature:

- Body to bonnet connection can select bolted bonnet, optional screwed bonnet with seal welding or pressure seal bonnet.
- Optional seal welding for screwed bonnet connection, sealing is more reliable and can realize the disassembling maintenance.
- Fully guided disc, hard-faced, wear-resistant for longer usage life.
- Connection disc and stem by disc cover, with non-rotating disc, restrict the disc to rotate, while allowing tiny movement to seal in the face.
- Stem with the form of packing seal, strict requirement to medium leakage, optional choose bellow and packing double sealing form, including metal bellow products are imported from Germany.
- Optional cobalt free hard facing.

Nuclear Check Valve

- Lift Check Valve
- Swing Check Valve
- Axial Flow Check Valve
- Dual Plate Check Valve



Design code: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≤50mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Socket Welding, Butt welding, Flange
Material of the valve body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Body to bonnet connection: Bolted Bonnet, Pressured seal bonnet.
- Threaded connection with standby lip seal welding is more reliable and can realize the disassembling maintenance.
- Fully Bonnet-guided and Control the length of guide to prevent unsmooth stagnation of opening and closing the disc.
- Hard faced disc piston. Wear-resistant for longer usage life.
- Low pressure differential to open and low pressure to seal: the piston sealing performance can be tested in line.
- Optional Cobalt Free Hard Facing.

Design code: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	>50mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Butt welding, Flange
Material of the valve body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Body to bonnet connection: Bolted Bonnet and pressured seal bonnet.
- Design of Built-in pin decreases the leakage path in body and increases readability.
- Structure of anti-rotary disc realizes the seal and anti-rotary of disc.
- Optional Cobalt Free Hard Facing.
- Switch position indicator, quick-opening and slowly-closing are elected extra by demand.

Design code: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≥15mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Socket Welding, Butt welding, Flange
Material of the valve body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Both the body and seat design are suitable for medium flowing. The design features ensure flow efficiency of the service medium and minimize pressure loss.
- Because of the features of the spring load, low mass disc and shorter travel, the disc can be closed as quickly as possible.
- Closed steadily and No water hammer.
- Optional Cobalt Free Hard Facing.
- Manual switch and check online for seals are elected extra by demand.

Design code: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	>50mm
Operating temperature	-196~370°C
Design pressure	≤25MPa
Seismic category	I
Type of connection	Wafer, Flange
Material of the valve body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Short in length, Small size and Light in weight.
- Valve bodies are a one-piece and short cylinder design with no holes through body wall, there is no need for external pins or plugs and no leakage toward outside.
- Two high torsion springs ensure valve closure as quick as possible, and reduces water hammer.
- Grinding by special purpose machine, valve is sealed with plane and has high interchangeability.
- Optional cobalt free hard facing.

Nuclear Ball Valve

- Manual ball valve
- Electric actuator ball valve
- Pneumatic actuator ball valve



Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

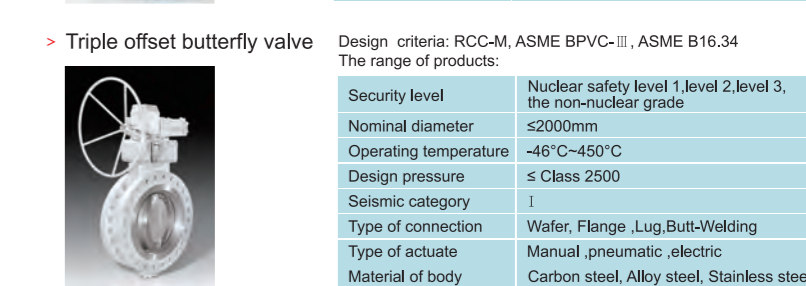
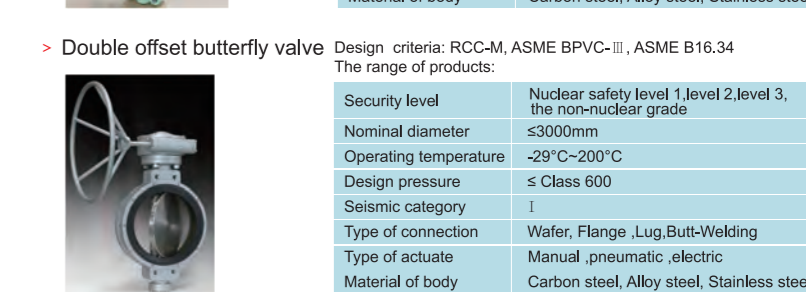
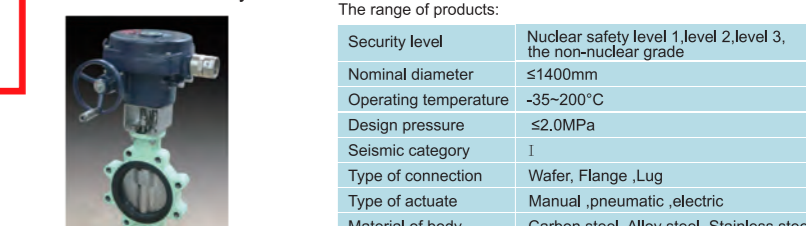
Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≤1500mm
Nominal pressure	Class 150~Class 2500
Operating temperature	-196~370°C
Seismic category	I
Type of connection	Socket Welding, Butt welding, Flange
Type of actuate	Manual, pneumatic, electric
Material of the valve body	Carbon steel, Alloy steel, Stainless steel, Duplex stainless steel
Structural type	Floating Ball Valve, Trunnion Mounted Ball Valve

Structural feature:

- Structure is simple and reliable, little installation space, small flowing resistance.
- Top-Entry, body/bonnet connection is bolted with male/female and metal/metal contact easy maintenance quick disassembly (patent protected) remove the ball by special tool.
- The ball and stem is integral one-piece designed for ND≤50, seal is more reliable.
- Disc spring or wave spring is designed for seat preloaded, simple structure, Reduce the hidden trouble of the metal parts into pipeline.
- Soft seal or metal seal structure according to the working condition.
- Cobalt hard facing or cobalt free hard facing for metal seat ball valve.

Nuclear Butterfly Valve

- Concentric butterfly valve
- Double offset butterfly valve
- Triple offset butterfly valve



Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≤1400mm
Operating temperature	-35~200°C
Design pressure	≤2.0MPa
Seismic category	I
Type of connection	Wafer, Flange, Lug
Type of actuate	Manual, pneumatic, electric
Material of body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Simple structure, reliable sealing, long service life, easy maintenance.
- Frameless type seat, lower operating torque.
- Stem triple offset seal to resist outside leakage.
- No pin to resist internal leakage.
- Anti-blowout shaft.

Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≤3000mm
Operating temperature	-29°C~200°C
Design pressure	≤ Class 600
Seismic category	I
Type of connection	Wafer, Flange, Lug, Butt-Welding
Type of actuate	Manual, pneumatic, electric
Material of body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- Lower torque and Low friction.
- Replaceable seat.
- Long service life, easy maintenance.
- Zero leakage in both directions pressure.

Design criteria: RCC-M, ASME BPVC-III, ASME B16.34
The range of products:

Security level	Nuclear safety level 1, level 2, level 3, the non-nuclear grade
Nominal diameter	≤2000mm
Operating temperature	-46°C~450°C
Design pressure	≤ Class 2500
Seismic category	I
Type of connection	Wafer, Flange, Lug, Butt-Welding
Type of actuate	Manual, pneumatic, electric
Material of body	Carbon steel, Alloy steel, Stainless steel

Structural feature:

- General sealing ring, easy maintenance.
- Zero leakage in both directions and total pressure.
- Lower torque, easy operation.
- One-piece shaft, high strength and safety function.
- Prevent the shaft blowout protection function.
- Wear-resistant bearing for longer service life.
- Instruction: Users choose metal-graphite or pure metal sealing ring structure according to actual working condition.

NW NEWAY

NUCLEAR VALVE

Countries across the world have put the first priority on developing nuclear power for the reason that it has been recognized as one of the cleanest energy at present. Neway Valve has the civil nuclear safety equipment design / manufacturing license issued by China NNSA , the ASME N & NPT certificate issued by ASME authentication center and a complete quality assurance system to guarantee a high-quality solution of nuclear valves. So far, Neway has offered nuclear valves in various domestic nuclear projects and experimental reactors. With the professional nuclear valve R&D team and advanced laboratory equipment, Neway Valve will be dedicated in realizing localization of nuclear power equipment in the long-run.



360° Support and service

As one of the leading valve manufacturers in the world, Neway employs the latest state of art and specialises in the development of superior and innovative product through our intensive R&D programs along with our management commitment to excellence and to the engineering of product to provide the valve solutions to meet the industrial needs.

Complete Solutions for Industrial Valves