



DIE ERSTE INDUSTRY CO., LTD. A name with a promise.



**DIE ERSTE** Industry Co., Ltd., headquartered in Taiwan, has been specializing in marketing and distribution of industry valves, instrumentation valves and valve automation accessories since 1982. **DIE ERSTE** has outstanding production and export businesses in over 30 countries, offering a wide product range including Ball, Gate, Globe, Check, Butterfly and Needle Valves, Valve Actuators, Pipes and Fittings for piping applications in the Oil & Gas, Chemical Processing, Water Resource, Semiconductor and General Industries, and providing the OEM/ODM service of Investment Casting.

**DIE ERSTE** now operates 2 offices in Taiwan & Shanghai, China, integrating resources from its joint venture companies including an engineering consultant company in Ontario, Canada, a valve actuator factory in Taiwan and an investment foundry in Guang-Dong, China. Leveraging the knowledge and strength from our technical sales force, engineering and service teams, combined with the quality products and resources of the manufacturers, our products comply with international specifications such as ISO, DIN, ANSI, ASME, JIS, AWWA, API, 3A and BS standards. Hence we are fully capable to help you meet your objectives.

By satisfying each of our clients' unique needs, **DIE ERSTE** is making a bold statement to the industry. With more than 24 years of experience, a selection of over 5000 items, and with comprehensive technical support, **DIE ERSTE** offers One-Stop Shopping for a range of quality and economical products. Combined with reliable and tailored consultation, superior technical support and attentive customer service, **DIE ERSTE** services consistently achieves results that exceed our clients' expectations. Our track record, personal service and commitment to long-term business relationships has earned us total trust from our clients.

**DIE ERSTE** is equipped to be the leading player in the VALVE industry for the next 20 years as we are today. To prosper in today's marketplace, your business will often need to change and adapt, and we change with you to ensure you achieve your targets.

**TOGETHER, WE CAN ACHIEVE.**



弊社は、1982年設立の企業で、本社は台中に御座います。工業用弁、アクチュエーター、及び、関連装置の販売をしております。また、製造と輸出も手掛けており、30年以上の実績があります。弊社製品は、JIS, DIN, ANSI, ASME, ISO, AWWA, API, 3A 及び、BS 基準などの国際仕様基準を満たしております。弊社が他社と異なります特長は、品質とサービス内容に御座います。TUV ISO9001 認証メーカーで、CRN登録、API 607 火災安全承認、ATEX94/9/EC 認証、ジャーマニシャーロイド、AD-WO/TRD 100 & PED 97/23/EC 認証を頂いております弊社ではお客様の配管上でのご要望に完全にお応えできる製品群を揃えております。弊社では、創業25周年を記念して、新規の取り組みを行っております。つまり、若手、ベテランが専門チームを組んで技術的にも営業的にも豊かな経験を踏まえた改革チームを作って業務を展開せんとしております。弊社は従来までと同様、今後の20年間においても、バルブ市場での主力企業として、成果を挙げたいと思っております。宜しくお願い申し上げます。

## Industry Valve

- General purpose ball valves
- API 607 fire safe approved ball valves
- API 6D ball valves
- Forged steel ball valves
- Cast iron ball valves
- Butterfly valves
- OEM/ODM service for investment casting



### General purpose ball valves

The DIE ERSTE series ball valve, which include an extensive range of full and reduced bore ball valves serving a comprehensive spectrum of applications in the chemical, pharmaceutical, oil, petrochemical and allied process industries, accommodates a wide choice of stainless/carbon steel body, seats, seals, and accessories for almost every type of manual or automated application with the direct mount pad. Valves are available from 1/4" to 12" sizes and are also suitable for corrosive services.



### API 607 fire safe approved ball valves

The FSB series, tested and conform to the API 607 4th edition standard, is available in full port and standard port. Threaded, socket weld and butt weld end connections are offered as standard, and custom connections are offered upon request. The FSB series features live-loaded stem seals, redundant body seal and stem seal, investment cast stainless steel bodies and carbon steel bodies. An integrally cast actuator mounting pad complies with ISO 5211 standards.



### API 6D ball valves

Cast steel ball valves, CD & KO series, certificated with API 6D, are suitable for use on various kinds of pipelines of Class 150~2500, PN10~PN420, and JIS10K~JIS20K to cut off, or turn on, the pipeline medium, of which the operation types include worm gear, manual, pneumatic or electric actuators, being in general of flange connection, and butt welding ends connection as well. These two and three piece trunnion mounted ball valves for most high pressure process services including oil and gas, LNG, and gas processing and distribution.



### Forged steel ball valves

GD series forged steel ball valves are available in 3/8" thru 2" line sizes, 150 thru 1500 ANSI Class ratings and in a variety of body and trim materials. Two inch and smaller valves are available with threaded or socket weld end connections as standard. Applications include: hydraulic, chemical, steam, oil/gas, power, petrochemical, marine, mining, construction and etc.



### Cast iron ball valves

Cast iron ball valves feature blow-out proof stem and anti-static design, and available from 1/2" to 8" sizes. These DIE ERSTE simple quarter turn ball valves have the same face to face dimensions as a standard of ASME B16.10/JIS B2002.



### Butterfly valves

Available in sizes of DN40 up to DN2600, the butterfly valve features modular design with variety of seals and choice of stainless steel body or resin coated iron lug/ wafer/ flange body. Valve seats are designed for full pressure, bi-directional and bubble-tight sealing. Value is very successful in designing full range of butterfly valves such as centric type, double eccentric type and triple eccentric type, as well as seat materials including Rubber, Teflon and Metal with integration into an electric actuator, a pneumatic actuator or lockable hand lever.



### OEM/ODM service for investment casting

Based in Guang-Dong, China, DIE ERSTE's investment foundry, delivers superior stainless steel lost wax castings throughout the world. Our knowledge in core making and assembly allows us to make castings with intricate interior and exterior design. Our skills in melting and molding further give us the ability to pour castings of such low porosity that the castings meet the standards of high strength required by the aircraft industry. We are dedicated to working with and responding to the needs of our customers.

## Industry Valve

- Stainless steel gate, globe & check valves
- API 600 cast & API 602 forged steel gate, globe & check valves
- Cast iron gate, globe & check valves
- Dual plate check valves
- Pipe-line strainers (stainless/cast/forged steel & cast iron)



### Stainless steel gate, globe & check valves

Conforming to ASME Class 150/300 with the sizes of 1/2" to 24", the stainless steel gate/globe/check valves are designed to API 603. The valves with resilient discs are designed and manufactured to ASME B16.10. Suitable for use with drinking water and waste water, in below ground applications. Used for the isolation of sections and branches in pipelines. The stem is of integral forged T design, and thus the strength of that area conforms to API 591. Class 150/300/600/JIS10K/JIS20K and PN16/25/40 flanged end gate/globe/check are available.



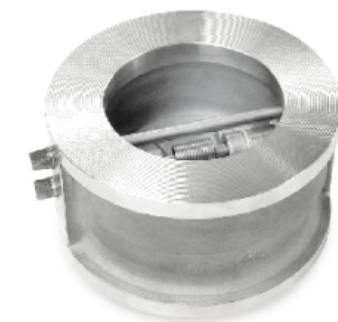
### API 600 cast & API 602 forged steel gate, globe & check valves

For years DIE ERSTE Industries' premier and comprehensive line of gate, globe and check valves, featuring the leading design with manufacturing skill, have been satisfying the needs of oil & gas, refining, and chemical industries. Respectively manufactured to API standard 600 and API 602, DIE ERSTE's gate valves are commonly used where minimum pressure drop conforming to Class 150/300/600/JIS10K/JIS20K & PN16/25/40 and bidirectional on-off service is required. Globe valves are used where throttling or shut-off is required while the swing check valves are used to prevent flow reversal in piping systems. Cast iron gate, globe & check valves are also available.



### Cast iron gate, globe & check valves

DIE ERSTE line of cast iron valves includes gate, globe and check valves for the application demands of petroleum refineries, chemical processing facilities and water and sewage treatment plants. Each valve meets or exceeds stringent ASTM specifications.



### Dual plate check valves

In sizes 2" through 48", DIE ERSTE offers ASME Class 150/300/600/900/1500/2500 dual plate check valves in ASTM CF8M, CF8, and WCB for pressures to 102 bar (1480 psi) and temperatures to -28.8~426.7°C (-20~800°F). These double door wafer body check valves are compactly designed to fit wafer, lug, FF and RTJ flanges and are available with stainless steel disc with Buna-N, Viton, or Metal seats. DE's double door check valves are ideal for liquid and gas service applications for oil, gas, water, chemical, HVAC and pumping system.



### Pipe-line strainers (stainless/cast/forged steel & cast iron)

A pipe-line strainer is a device which provides a means of mechanically removing solids from a flowing fluid by utilizing a perforated or wire mesh straining element. As with all the DE strainers, basket strainers are available in an almost endless combination of materials, pressures, end connections and cover configurations from 1/4" to 24". Units are available in stainless steel, cast steel, forged steel and cast iron, and most other alloys.



- Safety valves
- Pressure reducing valves
- Steam traps
- Sliding gate valves
- Sanitary clamp, union and butt-welding fittings & valves



### Safety valves

The safety valve with stainless steel/brass body comprises a spring-loaded main valve incorporating a cylinder with fitting piston. A similarly constructed relay safety valve is mounted on the main valve chest and arranged, when open, to discharge under the main operating piston in the cylinder., and operating pressure settings are controlled by alteration of the adjusting screws on the main and relay valve spindles.



### Pressure reducing valves

Reducing valves provide a steady pressure into a system that operates at a lower pressure than the supply system and fill the system to a preset pressure for optimum performance. DIE ERSTE reducing valves can normally be set for any desired downstream pressure within the design limits of the valve. Once the valve is set, the reduced pressure will be maintained regardless of changes in supply pressure and regardless of the system load, providing it does not exceed the design capacity of the reducer.



### Steam traps

Your solution source for steam, air and hot water systems. DIE ERSTE thermodynamic steam traps are rugged devices designed for reliability with only one moving part. These traps work in continuous or batch service in applications including autoclaves, re-boilers, storage tanks, and tank coils. Here, DIE ERSTE offers basic types of steam traps including bimetallic, circinate disc, free floating ball type with flange end, inverted bucket type, membrane-box type, UF2 type steam And water separator.



### Sliding gate valves

The sliding gate valves adjust and control liquid, steam and gaseous media accurately, quickly and efficiently. The seats of sliding gate valves are made up of a disc and plate, both slotted with openings that align to allow the required flow to pass through the orifices. Those two-part parts achieve levels of performance, reliability, and accuracy that are hard to find in other valve designs for the application of flow control.



### Sanitary clamp, union and butt-welding fittings & valves

DIE ERSTE supplies a comprehensive line of sanitary stainless steel butt-welding and clamp fittings, including ferrules, gaskets, clamps, and valves designed and manufactured in compliance with 3A, DANSK, DIN, IDF, RJT(BSM), SMS, MACON specifications for the biotechnology and pharmaceutical processing industries. These sanitary stainless steel process piping and fittings are designed to be used in any liquid flow process or high purity utility application where clean ability, sterility, dimensional integrity, and materials of construction are critical.



## Industry Valve

- Pipes
- Fittings
- Flanges
- Y-type cylinder control valves
- Knife gate valves
- Solenoid valves



### Pipes

In the field, DIE ERSTE supplies all kinds of pipe sizes including stainless steel pipes, mechanical tubes, equal-leg angle bars, tubes for boiler and heat exchanger, square & rectangular tubes, sanitary tubes, inside polished pipes, coated pipes, stainless steel sheets, plates and coils. Stainless steel pipe clamps and couplings, as well as seamless, flexible and food grade stainless steel pipe are also provided.



### Fittings

Pipe fittings are available as butt-welded, socket-welded & screw type fittings including elbows as 45 feet & 90 feet, tees, unions, couplings, caps, inserts, reducers & stub ends. Butt-welded fittings & screw type fittings are available in sizes ranging from 1/2" up to 24". Socket-welded fittings are available in sizes from 1/8" to 4". Fittings meet ASTM A-182, A403, B-160, B-336 & B-462. DE provides a variety of related services, such as custom fitting manufacture and design and CNC machine work.



### Flanges

Custom manufacturing of cast/forged steel, stainless steel and carbon steel flanges. Materials are forged to meet JIS5K, 10K, 20K, ANSI 150LB, 300LB, 600LB, 900LB, 1500LB, DIN PN10, PN16, PN40 with the size range from 1/2" to 56". Type: Plate, Slip-On, Lap-Joint, Socket-Weld, Screwed, Welding-Neck and Blind. Capabilities include hard-to-find piping products in most grades, specifications and custom machined bar products.



### Y-type cylinder control valves

Model SS-YCV series is actuated by a cylinder, providing a long stroke and high reliability because of its great range of supply pressure. Air cylinders are pneumatic linear actuators that are driven by a pressure differential in the cylinder's chambers. Cylinder-type actuators are suitable for applications where compactness or a higher thrust than that of diaphragm actuators is required. They are installed for on-off, emergency shut-off control system as well.



### Knife gate valves

Maintenance engineers in the pulp & paper, sewage and soft solids industries are plagued by problems caused by choked and eroded valves. Where regular valves fail, DIE ERSTE's knife gate valves outperform. Rugged body including flanges cast in stainless steel eliminates corrosion problem. In addition, the groove around the seat allows the gate to push particles aside and prevents clogging to make the flow lean the groove while the valve is open. The maximum working pressure is 16 bar (232 psi) and temperature is 100°C(212°F).



### Solenoid valves

The 2/2 & 3/2 way solenoid valves accept both AC and DC voltages while improving performance. These solenoid valves, which are made of brass, stainless steel and bronze, are designed to handle most fluid control applications like steam, water, air, oil & gas with the pressure rating from vacuum to 220 psi. The explosion proof types with level Ex m II according to EN50020, DIN VDE 0170/01710 are available.

- Pneumatic PURETORQ™ vane actuators
- Instrumentation ball valves & check valves
- Instrumentation needle valves
- PFA/PTFE valves (ball, check, needle and diaphragm valves) & fittings
- Pneumatic rack and pinion actuators
- NAMUR type v-solenoid™ valves
- Electric actuators



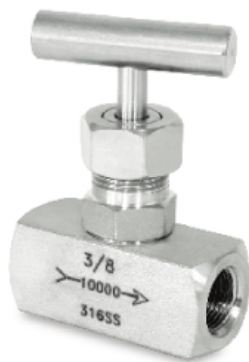
### Pneumatic PURETORQ™ vane actuators

PURETORQ™ invented and patented its vane-type, fixed seal, rotary pneumatic actuator, recognizing the need for long lasting, quarter-turn valve actuation with 11.30~768.33 Nm (100~6800 in-lbs) double acting torque output while the single acting torque output reaches 5.20~272.64 Nm (46~2413 in-lbs). Dual ISO/VDI VDE mounting pads and female drives efficiently facilitate the assembly with valves.



### Instrumentation ball valves & check valves

MH Series instrumentation ball/check valves provide 1/4 turn on/off and non-return control of fluid in instrumentation service with long life and low operating torque. Free floating ball design provides seat wear compensation. Swage tube connection meets the requirements of environment, high purity and high reliability. Each valve is 100% adjusted for the factory. Seat tests have a maximum allowable leak rate of 0.1 std cm<sup>2</sup>/min while no leakage is allowed for shell testing.



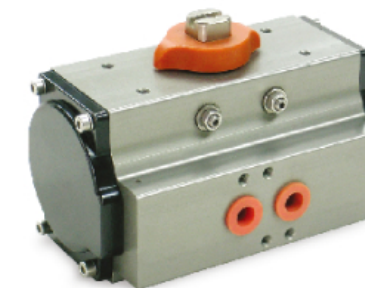
### Instrumentation needle valves

JY series instrumentation needle valves are non-attitude-sensitive, excess flow shot-off valves suitable for all instrument isolation duties, giving a pressure rating from 413.7 to 689.5 bar @ 37.78°C (6,000~10,000 psi @ 100°F). This valve designs have been tested for proof, burst and leakage, and typically used in corrosive service, high pressure sampling systems, high pressure shut down and test stands.



### PFA/PTFE valves (ball, check, needle and diaphragm valves) & fittings

These all wetted parts are made of PTFE and PFA resins which are used to produce high-purity fittings, valves, and tubing for fluid systems requiring excellent chemical resistance and offer solutions for CMP slurry system, DI water, and aggressive acids, bases and other chemicals. These valves, including check, needle, ball and diaphragm types, do not have any external metal parts that can corrode and represent a safety hazard in aggressive chemicals. In addition, extruded PFA/PTFE/FEP convolve, coil and spiral tubing are available as well.



### Pneumatic rack and pinion actuators

The rack & pinion actuators are reliable quality products, which can be relied on to perform faultlessly no matter how demanding the circumstances. The aluminum body of the actuator with anodized surfaces for superior corrosion protection is covered inside and out. This actuator's self-lubricating piston guide bands are positioned to negate side thrust while providing minimal sliding friction and higher actuator efficiencies. That's definitely the economic choice for small valves in the torque range of 14.12 to 1242.89 Nm (125 to 11000 in-lbs).



### NAMUR type v-solenoid™ valves

Direct mounting NAMUR solenoid valves which can be operated from -40°C up to 50°C (-40°F ~122°F) for process valve actuators. Patented rotary sealing plate features in the field conversion form 3/2 to 5/2 actions without the need for tools or additional parts, and incorporates exhaust feedback to increase actuator spring life span. Four choices: Standard, ATEX Ex, EX-PROOF and Intrinsically Safe.



### Electric actuators

The Jexme electric actuators are made in new sizes from 34.3 to 597.8 Nm (303.6 to 5290.8 in-lbs), which are generally applied for ball valves with maximum size 6", and butterfly valves with maximum size 12", and are available in on-off or modulating versions, with a choice of duty cycles. All models include standard manual override, visual position indicator, torque limiter and adjustable-position switches.



#### Commitment to Quality

**DIE ERSTE** maintains a worldwide commitment to excellence in the design of its products, as well as the control of their manufacturing processes. All major **DIE ERSTE** facilities are registered to the internationally recognized ISO-9001-2000 standard for Quality Management Systems, and maintain certification to apply the CE mark in accordance with 97/23/EC per the Pressure Equipment Directive. Satellite suppliers operate under the auspices of the primary locations, using the same procedures, documents and practices. Certified personnel, working in an independently certified system of controls, assure that all **DIE ERSTE** products will provide the long life and excellent service our customers have come to expect. Design expertise, available to all locations, allows **DIE ERSTE** to customize product to meet the most demanding and specialized needs. A long history of excellent field performance demonstrates the robustness of the **DIE ERSTE** line. With ISO registered facilities around the world, **DIE ERSTE** has demonstrated its commitment to Quality in products, in practices, and in performance.



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For general information, please contact our head office, or visit our website at

▼  
[www.die-erste.com](http://www.die-erste.com)  
[sales@die-erste.com](mailto:sales@die-erste.com)





Taiwan  
5F.-1, No.936, Sec. 4,  
Wen-Sin Rd., Taichung  
City 406, Taiwan  
T +886(4)2231 0059  
F +886(4)2236 0236

Shanghai  
Room 1803, No. 678,  
Gu-Bei Road,  
Shanghai, China  
T +86(21)6295 6805  
F +86(21)6295 6809

**DIE ERSTE INDUSTRY CO., LTD.**  
[www.die-erste.com](http://www.die-erste.com) | [sales@die-erste.com](mailto:sales@die-erste.com)

