
FLOW, ENGINEERED FOR SYSTEM RELIABILITY

From critical components to complete fluid systems – designed to reduce risk, downtime, and operational uncertainty.



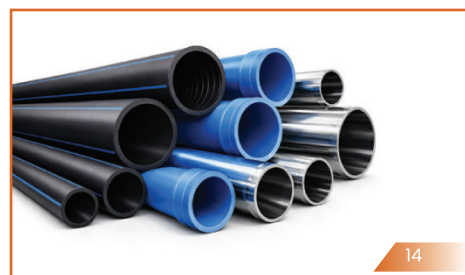
COMPANY OVERVIEW

Jay-V Group supplies fluid control components for industrial and process applications, with a focus on reliable operation and long service life. The range includes valves, actuators, piping, fittings, seals, and gaskets used across a wide variety of fluid handling systems.

Technical support is provided where required, including assistance with component selection for new applications and review of existing installations to help reduce leakage, premature wear, and unplanned downtime.

Applications range from general service through to demanding and critical duties, with components selected to suit the specific operating conditions and system requirements.

Products are sourced from **established manufacturers** and selected to meet recognised industry standards. Emphasis is placed on correct specification, material compatibility, and suitability for the intended duty and operating environment.



INDUSTRIES AND APPLICATIONS



Water & Wastewater

Potable water, wastewater treatment, effluent handling, pump stations, and utility networks requiring corrosion resistance, leak prevention, and dependable isolation.



Mining & Mineral Processing

Slurry transport, dewatering, tailings, and abrasive services where robust construction and wear resistance are essential to uptime and safety.



Chemical & Process Industries

Chemical transfer, corrosive media handling, and process heating and cooling requiring careful material selection and compliance with operating conditions.



Power & Energy

Steam, condensate, cooling, and auxiliary systems operating under elevated pressures and temperatures where reliability is critical to availability.



Food & Beverage (Hygienic Applications)

Heating, cooling, and fluid transfer systems for hygienic and viscous products, supporting cleanability, material compatibility, and process efficiency.



Pulp & Paper

Pulp handling, stock preparation, process water, and chemical systems involving high flow rates, fibrous media, and demanding operating cycles.



Industrial Utilities & General Service

Cooling, heating, compressed air, and process utility systems across manufacturing and industrial facilities.



Why Jay-V Group



CORRECT SPECIFICATION

Selecting the correct valve, piping, and sealing components is critical to system reliability. Jay-V supports customers with component selection based on pressure, temperature, media compatibility, and operating conditions.

✓ RELIABLE INDUSTRIAL COMPONENTS

Products are sourced from established manufacturers and selected to meet recognised international standards and industrial operating requirements.

✓ REDUCED DOWNTIME

Reliable isolation, flow control, and sealing solutions designed to minimise leakage, wear, and unexpected shutdowns.

✓ RESPONSIVE TECHNICAL SUPPORT

Support with application review, component selection, and documentation to help ensure correct installation and operation.

✓ INDUSTRIAL APPLICATION EXPERIENCE

Components supplied across demanding industries including mining, water treatment, chemical processing, power, and manufacturing.

✓ COMPLETE FLUID SYSTEM COMPONENTS

Valves, actuators, piping, fittings, and sealing solutions supplied to support reliable operation of complete fluid systems.



Butterfly Valves

Resilient Seated, High-Performance, Triple Offset, Lined, Slurry & Severe-Service Butterfly Valves

Size Range	NPS 1 to 66 DN 25 to 1500
Body Style	Wafer Lug Double Flanged Full Flanged Long Pattern
Temperature Range	-320°F to 900°F -196°C to 482°C
Pressure Ratings	Bidirectional Bubble Tight to Zero Leakage Up to ASME Class 900 Up to 300 psi 20 bar (size and series dependent)
Body Materials	Cast Iron Ductile Iron Carbon Steel Stainless Steel Nickel Aluminum Bronze
Disc / Stem Materials	Stainless Steel Duplex Stainless Steel Aluminum Bronze 17-4PH SS Monel® Hastelloy® Titanium PFA Over-Moulded Ceramic UHMWPE PTFE
Seat Materials	EPDM BUNA-N FKM PTFE RPTFE UHMWPE PFA Metal Graphite Engineered Thermoplastics
Applications	Water & Wastewater HVAC Chemicals Oil & Gas Power Cryogenic Corrosive & Abrasive Media Slurry Ultra-Pure Marine High Pressure & High Temperature Service

The **butterfly valve** range provides reliable isolation and control across general, severe, and critical service applications. Multiple design configurations, materials, and seat options are available to suit different operating conditions.

Butterfly valve selection depends on pressure, temperature, media, shut-off requirements, and actuation. The range covers general, severe, and critical service applications; final material and configuration selection should be confirmed for the specific operating conditions. Technical support is available to assist with correct valve selection.



Ball Valves

floating, trunnion-mounted, segmented V-ball, severe service, lined, multi-port, and high-pressure designs.

Size Range	NPS 1/4 to 36 DN 8 to 900
Body Style	1-Piece 2-Piece 3-Piece Split Body Forged Cast
Port Configuration	Full Port Standard Port Reduced Port Segmented V-Port
Temperature Range	-50°F to 1100°F -46°C to 593°C
Pressure Ratings	Up to ASME Class 1500 Up to 4500 psi WOG PN 10 to PN 720 (size and series dependent)
Body Materials	Carbon Steel Stainless Steel Duplex Stainless Steel Special Alloys Forged Alloy Steels
Ball / Stem Materials	Stainless Steel Duplex Stainless Steel Carbon Steel Inconel® Hastelloy® Titanium Chrome Carbide Coated HVOF Hardened PFA Over-Moulded
Seat Materials	RPTFE PTFE TFM UHMWPE PEEK Tek-Fil® Nylon Metal
End Connections	Threaded Socket Weld Butt Weld Flanged RTJ Tri-Clamp
Applications	Water & Wastewater Oil & Gas Chemicals Power Steam Slurry & Abrasive Media High Pressure & High Temperature Corrosive & Ultra-Pure Service Flow & Control Applications

The **ball valve** range provides quarter-turn isolation and control for general, severe, and critical service applications. Multiple body configurations, port designs, materials, and seat options are available to suit different pressure, temperature, and media requirements.

Ball valve specifications shown are indicative only. Pressure ratings, temperature limits, materials, and end connections vary by valve type, size, and series. Final selection should be confirmed against the relevant datasheets and application requirements.



Knife-Gate Valve

Standard, Slurry, Heavy-Duty, Uni-/Bi-directional, Lined, and Severe-duty variants

Size Range	NPS 2 to 48 DN 50 to 1200
Body Style	Wafer Lug Semi-Lug Single Piece Two-Piece Bolted Full Flanged
Temperature Range	-20°F to 400°F -29°C to 204°C (higher temperatures available on selected series and materials)
Pressure Ratings	Up to 740 psi 51 bar (pressure rating dependent on size, series, and directionality)
Flow Direction	Unidirectional Bidirectional
Body Materials	Cast Iron Ductile Iron Carbon Steel Stainless Steel
Gate Materials	304 SS 316 SS 17-4PH SS Duplex Stainless Steel
Seat / Liner Materials	Metal EPDM BUNA-N FKM PTFE RPTFE Natural Rubber Polyurethane Elastomer Sleeves
Stem / Packing Materials	Stainless Steel PTFE Impregnated Synthetic Fiber Quad Seal Packing
Actuation Options	Handwheel Lever Bevel Gear Pneumatic Hydraulic Electric
Applications	Mining Power Pulp & Paper Chemical Processing Water & Wastewater Slurry & Abrasive Media Corrosive, Viscous & High-Solids Service

Knife gate valves are used for on/off isolation in applications involving high solids, slurries, and viscous or abrasive media. The range includes unidirectional and bidirectional designs with various body, sealing, and actuation options to suit the operating conditions.

Knife gate valve specifications shown are indicative only. Pressure ratings, temperature limits, materials, and sealing arrangements vary by valve design, size, and service direction. Final selection should be confirmed against the relevant datasheets and operating conditions.



Gate Valves

Cast Steel, Wedge Gate, Forged Steel, Sluice, Actuated

Size Range	NPS ½ to 64 DN 15 to 1600
Body Style	Bolted Bonnet OS&Y Rising Stem Non-Rising Stem
Temperature Range	Cryogenic to High Temperature (material and trim dependent)
Pressure Ratings	ASME Class 150 300 600 900 1500 2500 PN-10 PN-16 PN-25 PN-40
Body Materials	Cast Iron Ductile Iron Carbon Steel Stainless Steel Alloy Steel
Trim / Gate Materials	Stainless Steel Alloy Steel Hardened Steel
End Connections	Flanged Butt Weld Socket Weld Threaded
Operation	Handwheel Gear Operated Electric Actuated Pneumatic Actuated
Standards & Testing	API 600 API 602 API 6D BS 1414 BS 5352 API 598

Gate valves provide reliable shut-off for pipelines and process systems where full-bore isolation is required. They are commonly used in water, steam, oil, gas, and industrial utility systems where minimal pressure drop and dependable isolation are essential.

Gate valve specifications shown are indicative only. Pressure ratings, temperature limits, materials, and end connections vary by valve design, size, and application. Final selection should be confirmed against relevant datasheets and operating conditions.



Globe Valves

Cast Steel, Forged Steel, Stainless Steel,
DIN

Size Range	NPS ½ to 48 DN 15 to 1200
Body Style	Bolted Bonnet OS&Y Angle Pattern Y-Pattern
Temperature Range	Cryogenic to High Temperature (material and trim dependent)
Pressure Ratings	ASME Class 150 300 600 900 1500 2500 PN-10 PN-16 PN-25 PN-40
Body Materials	Cast Iron Carbon Steel Alloy Steel Stainless Steel
Disc / Stem Materials	Stainless Steel Alloy Steel Hardened Steel
End Connections	Flanged Butt Weld Socket Weld Threaded
Operation	Handwheel Gear Operated Electric Actuated Pneumatic Actuated
Standards & Testing	API 600 API 602 BS 1873 BS 5352 API 598

Globe valves are designed for throttling and flow regulation in pipelines and process systems. Their linear motion design allows accurate control of flow, making them suitable for steam, condensate, process fluids, and industrial utility services

Globe valve specifications shown are indicative only. Pressure ratings, temperature limits, materials, and end connections vary by valve type, size, and application. Final selection should be confirmed against the relevant datasheets and operating conditions.



Check Valves

Wafer, Flanged, Ball Check, Slurry, Isolation, and Accessory-equipped

Size Range	NPS 1 to 60 DN 25 to 1500
Body Style	Wafer Flanged Ball Check Dual-Function Check / Isolation
Temperature Range	Cryogenic to High Temperature (dependent on materials, elastomers, and trim selection)
Pressure Ratings	ASME Class 125 150 300 600 900 1500 PN 10 16 25 40 64 100 (size, series, and material dependent)
Body Materials	Cast Iron Ductile Iron Carbon Steel Stainless Steel
Disc / Ball Materials	Stainless Steel Urethane-Coated Aluminum Silica Bronze Hardened Carbon Steel
Seat Materials	Integral Metal Stainless Steel Seat Rings Soft Seats: BUNA-N EPDM Viton™ PTFE
Lining / Coating Options	Epoxy Natural Rubber Nitrile EPDM Bromobutyl
End Connections	Wafer Flanged (RF)
Optional Accessories	External Springs Weights Hydraulic Dampers Position Indicators Limit Switches Backflush Levers Fusible Links Strainers
Applications	Water & Wastewater Slurry & Abrasive Media Chemical Processing Mining Power Dewatering Pulp & Paper Process & Utility Services

Check valves are used to prevent reverse flow and protect pumps, piping, and process equipment. The range includes wafer, flanged, and ball check designs suitable for liquid, slurry, and general process applications, with material and accessory options available to suit operating conditions.

Check valve specifications shown are indicative only. Pressure ratings, temperature limits, materials, and accessories vary by valve type, size, and application. Final selection should be confirmed against the relevant datasheets and operating conditions.



Valve Actuators

Actuator Types

Pneumatic	Hydraulic
Electric	Electro-Hydraulic

Operating Modes

On / Off
 Modulating
 Fail Open | Fail Close | Fail Last | Fail in Place

Torque Output

Pneumatic Rack & Pinion: up to ±5 000 N·m
 Pneumatic / Hydraulic Scotch Yoke: up to 100 000 N·m
 Electric: up to ±9 000 N·m
 (dependent on actuator type and configuration)

Pressure / Power Supply

Pneumatic: 2.8 – 10 bar (40 – 150 psi)
 Hydraulic: up to 207 bar (3 000 psi)
 Electric: 24 V AC/DC | 120 – 240 V AC | 3-Phase
 options available

Temperature Range

Standard: -20 °C to +93 °C
 Extended: down to -50 °C and up to +250 °C
 (seal kit and actuator dependent)

Rotation / Travel

Quarter-Turn: 90° (±5° adjustment)
 Extended rotation options available
 Linear actuation available on selected configurations

Mounting & Interfaces

ISO 5211 direct mounting
 NAMUR accessory mounting

Enclosure & Protection

IP66 | IP67 | IP68 (submersible options available)
 NEMA 4 | 4X | 6
 Weatherproof and Explosion-Proof options available

Control & Accessories

Positioners (pneumatic & electro-pneumatic)
 Limit switches | Proximity sensors
 Solenoid valves | Manual overrides
 Partial stroke testing | Hydraulic dampers

Certifications & Compliance

ATEX | IECEx | SIL 3 | PED
 UL | CSA | CE (model dependent)

Valve Compatibility

Butterfly Valves | Ball Valves | Knife Gate Valves |
 Slurry Valves

Actuators are used to automate valves across industrial and process applications. Pneumatic, electric, hydraulic, and electro-hydraulic options are available for on/off and modulating control to suit the operating requirements.

Actuator specifications shown are indicative only. Torque output, operating limits, materials, and certifications vary by actuator type and configuration. Final selection should be confirmed against valve requirements and operating conditions.



Couplings & Fittings – Technical Specifications

Product Types

Couplings | Elbows | Tees | Reducers | Flanges | Adaptors

Materials	PVC-U HDPE (PE100) Stainless Steel (304 / 304L 316 / 316L)
Size Range	PVC & HDPE: 20 mm to 1000 mm Stainless Steel: DN 6 to DN 600 (material and fitting type dependent)
Pressure Ratings	PVC: PN 6 to PN 25 HDPE: PN 4 to PN 34 Stainless Steel: Schedule 10 Schedule 40 (other classes available on request)
Connection Types	PVC: Rubber ring joint Solvent weld HDPE: Butt fusion Electrofusion Mechanical couplings Stainless Steel: Welded Threaded Flanged
Standards	PVC: SANS 966 ISO 1452 HDPE: SANS 4427-1 Stainless Steel: ASTM A182 ASTM A403 ASTM A815
Performance Characteristics	PVC: Lightweight Corrosion resistant Smooth bore HDPE: Flexible Abrasion resistant Leak-free fusion joints Stainless Steel: High strength Hygienic Corrosion resistant
Performance Characteristics	PVC: Lightweight Corrosion resistant Smooth bore HDPE: Flexible Abrasion resistant Leak-free fusion joints Stainless Steel: High strength Hygienic Corrosion resistant
Typical Applications	Water & utilities Industrial services Mining Food & beverage Process piping Effluent handling

Couplings and fittings are used to connect pipes, valves, and equipment within fluid handling systems. Metallic and thermoplastic options are available to suit different pressures, temperatures, and installation requirements, with a range of connection methods and materials.

Coupling and fitting specifications shown are indicative only. Dimensions, materials, pressure ratings, and connection types vary by product and application. Final selection should be confirmed against the relevant standards and operating conditions.



Seals & Gaskets

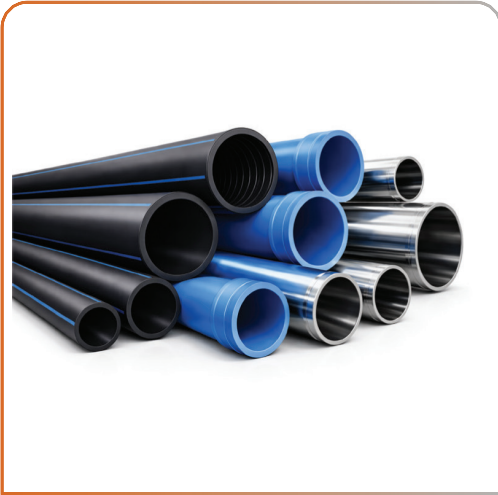
Product Types

Gaskets | Spiral Wound Gaskets | O-Rings | Sealing Rings | Sheet Gaskets

Materials	EPDM NBR FKM (Viton®) PTFE Expanded PTFE Graphite Stainless Steel (for spiral wound construction) Compressed Fibre
Temperature Range	-40 °C to +450 °C (material and gasket type dependent)
Pressure Capability	Suitable for low to high pressure service (including high-pressure flange applications)
Chemical Resistance	Resistant to water, oils, fuels, chemicals, and process media (material dependent)
Standards & Compatibility	Suitable for use with flanged pipe systems, valves, fittings, and heat exchangers
Typical Applications	Water & utilities Industrial services Chemical processing Food & beverage High-pressure and high-temperature process sealing

Seals and gaskets are used to prevent leakage at flanged, threaded, and equipment interfaces within fluid handling systems. The range includes elastomeric, PTFE-based, graphite, and spiral wound designs selected to suit pressure, temperature, and media requirements.

Seal and gasket specifications shown are indicative only. Material selection, pressure capability, and temperature limits vary by gasket type and application. Final selection should be confirmed against operating conditions and compatibility with mating components.



Pipes –PVC, HDPE & Stainless Steel

Pipe Types

PVC | HDPE | Stainless Steel

Materials

PVC: PVC-U | PVC-M (High Impact options available)
HDPE: PE100
Stainless Steel: 304 / 304L | 316 / 316L

Standards

PVC: SANS 966 | ISO 1452
HDPE: SANS 4427-1
Stainless Steel: ASTM A312 | ASTM A358 | ASTM A790

Size Range

PVC: 20 mm to 500 mm
HDPE: 20 mm to 1000 mm
Stainless Steel: DN 6 to DN 600 (material dependent)

Pressure Ratings

PVC: PN 6 to PN 25 (class and material dependent)
HDPE: PN 4 to PN 34
Stainless Steel: Schedule 10 | Schedule 40 (other classes available on request)

Temperature Range

PVC: Up to ±60 °C (derating required above 25 °C)
HDPE: Up to ±60 °C continuous service
Stainless Steel: Suitable for low to high temperature service (dependent on grade and application)

Joining / Construction

PVC: Rubber ring joint | Solvent weld
HDPE: Fusion welded joints
Stainless Steel: Seamless or welded pipe

Performance Characteristics

PVC: Lightweight | Corrosion resistant | Smooth bore
HDPE: Flexible | Abrasion resistant | Chemically inert
Stainless Steel: High strength | Hygienic | Corrosion resistant

Typical Applications

Water & utilities | Industrial services | Mining
Food & beverage | Process piping | Effluent handling

The **piping range** is used for fluid conveyance across utility, industrial, and process applications. PVC, HDPE, and stainless-steel options are available to suit different pressure, temperature, chemical resistance, and hygienic requirements.

Pipe specifications shown are indicative only. Dimensions, pressure ratings, temperature limits, materials, and joining methods vary by pipe type and application. Final selection should be confirmed against the relevant standards and operating conditions.

NOTES

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Contact

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Engineered solutions for reliable fluid systems.



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