



	ORBINOX
	INTERAPP
	WOUTER WITZEL
	OMV
	TECARTEC
	AVK
MEMBERS OF THE AVR GROUP	

**COMPLETE
VALVE SOLUTIONS**

 **AVK INDUSTRIAL
AUSTRALIA**



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WHEREVER, WHENEVER

AVK Industrial offers a wide range of durable valves tailored for various applications in the mining industry. Complete valve solutions supported by AVK dedicated brands, such as Orbinox, InterApp, Wouter Witzel, OMV and TEC artec.

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AVK INDUSTRIAL IS YOUR PARTNER OF CHOICE

AVK Industrial Australia is part of the AVK Australia Group and global AVK manufacturing Groups. We pride ourselves on supplying a full range of industrial valves, process controls, and actuation for a diverse range of industrial applications.

We focus on providing quality products to the highest standards with exceptional service and reliability. We supply our customers with complete packaged valve solutions to meet the most demanding applications. AVK Industrial can help you with technical valve selection and provide on-site support.

Our extensive product range covers a wide range of valve types, including, but not limited to, butterfly valves, knife gate valves, gate valves, check valves, air valves, ball valves, needle valves, penstocks, and accessories.



Proven solutions designed for mining

Our product brands, Orbinox, InterApp, Wouter Witzel, OMV and TEC artec, offer reliable and proven valve solutions for concentration, heap, and vat leaching, as well as for pressure acid leaching processes. This ensures maximum plant availability and maximises profitability in the most aggressive and demanding mineral processes.

Different types of valves are chosen based on their unique benefits and specific criteria such as flow control requirements, operating pressures, and the nature of the fluid being managed.

Endurance: Mining valves are specially crafted using robust materials engineered to endure the abrasive and corrosive conditions prevalent in the mining environment. These materials typically involve the use of advanced alloys and coatings meticulously designed to provide exceptional resistance against wear and tear, ensuring prolonged durability and reliability in highly demanding mining applications.

Pressure and temperature resistance:

Mining operations frequently encounter demanding high-pressure and high-temperature conditions.

The industrial valves used in mining are specifically engineered to manage these challenging circumstances effectively, guaranteeing dependable and secure operation.

Abrasion resistance: Industrial valves used in mining are equipped with hardened trim components or wear-resistant coatings to withstand erosive effects, preventing premature wear and maintaining optimal performance over time.

Safety features: Industrial valves utilised in the mining sector are equipped with various safety features to mitigate the risk of accidents and uncontrolled flow. These safety mechanisms include fail-safe systems, which are designed to activate in the event of a failure, emergency shut-off capabilities for immediate action in critical situations, and lockout features to prevent unauthorised operation and ensure safe maintenance procedures. These safety measures are essential for maintaining a secure and efficient working environment within mining operations.

Whether for new constructions or maintenance requirements, our readily available valves can be configured to your specific applications.

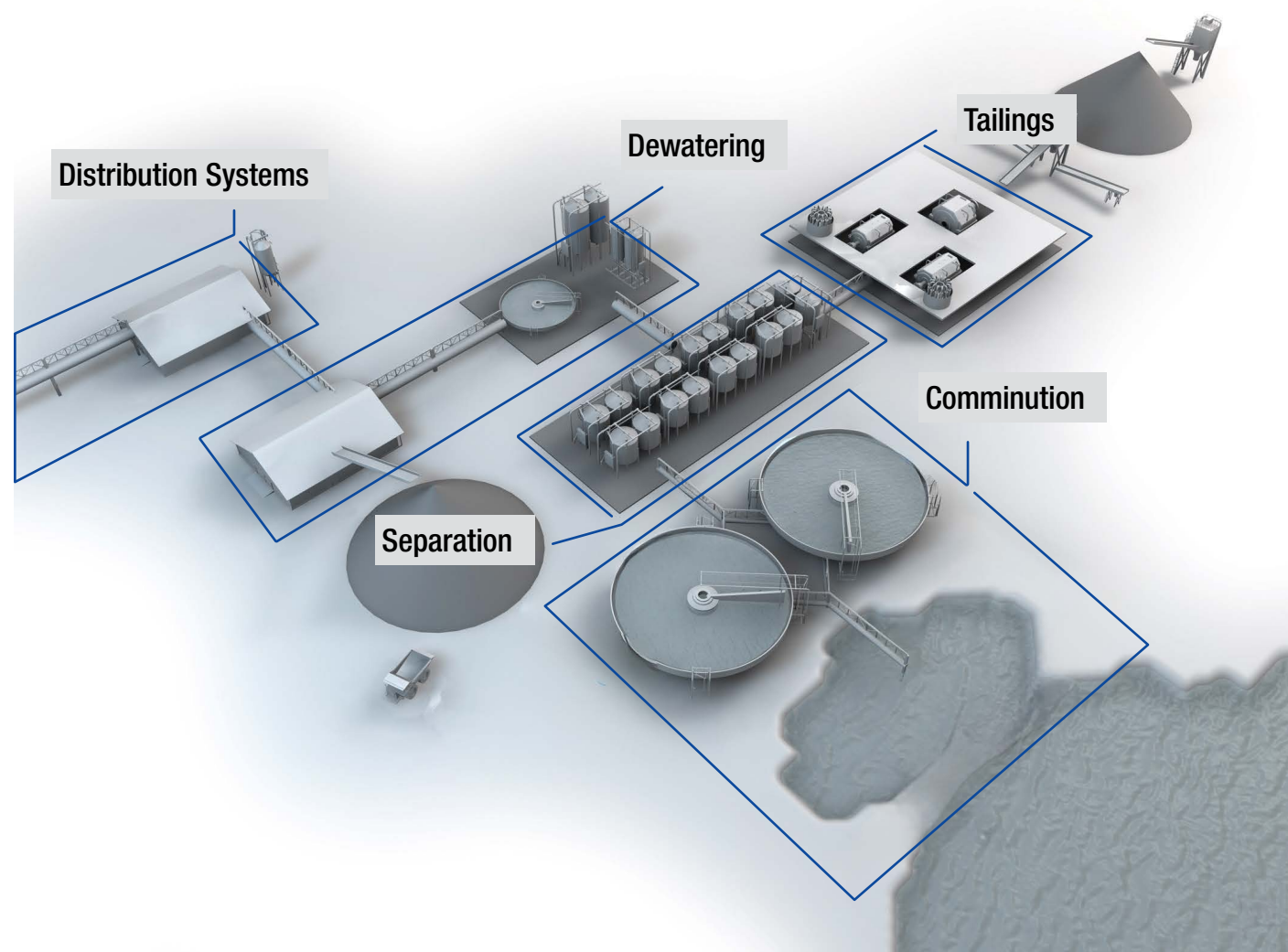


PROCESS / APPLICATION TABLE

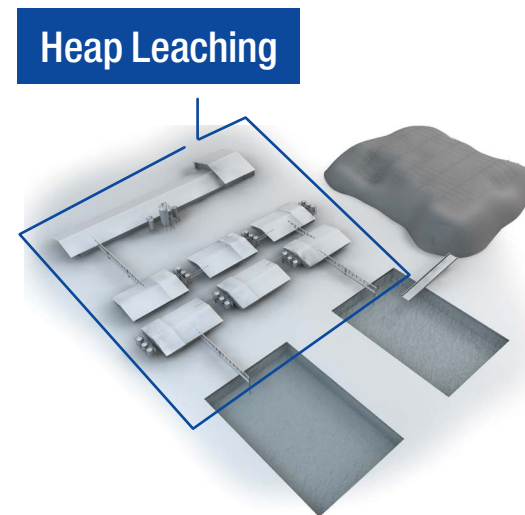
CHOOSE YOUR RIGHT VALVE

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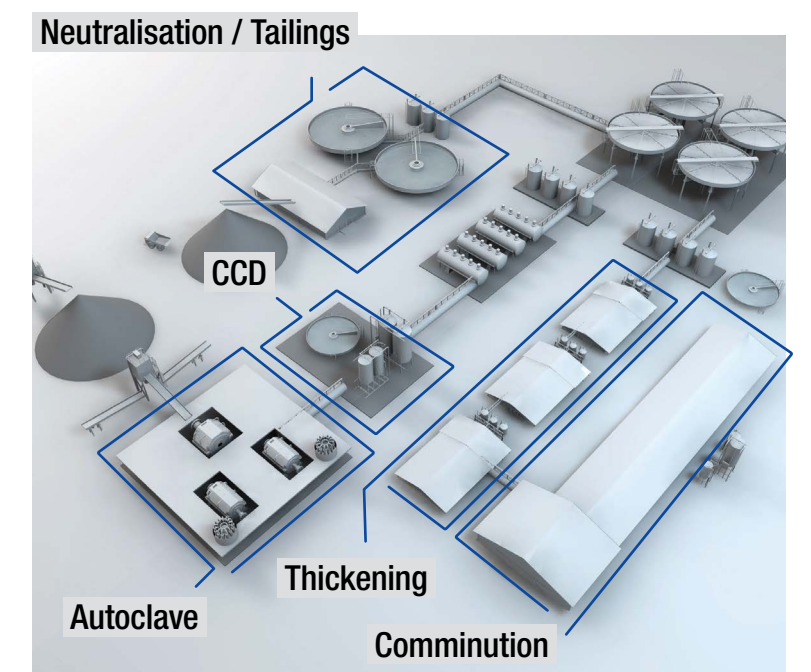
CONCENTRATION PROCESSES



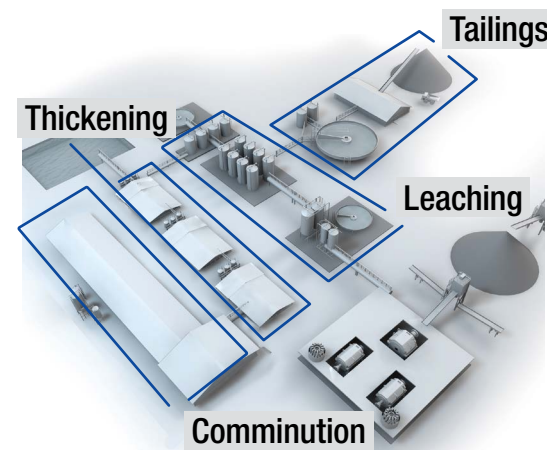
HYDROMETALLURGICAL PROCESSES



Pressure Acid Leaching

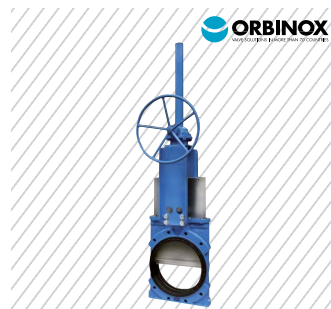


Vat Leaching



KNIFE GATE VALVES

DESIGNED FOR DEMANDING APPLICATIONS



VG
Wafer Style Slurry
Knife Gate Valve

Ductile iron or stainless steel body, stainless steel gate, two rubber sleeves and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: Up to DN1200

Pressure:

- 16 Bar ($\leq$ DN300)
- 12 Bar ($\leq$ DN 600)
- 10 Bar ($\leq$ DN 900)
- 5 Bar ($\leq$ DN 1200)

Temperature:

-10° C to +150°C



WG
Heavy Duty Slurry
Knife Gate Valve

Ductile iron or stainless steel body, stainless steel gate, two rubber sleeves and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: Up to DN900

Pressure:

- 16 Bar ($\leq$ DN600)
- 10 Bar ($\leq$ DN900)
- 5 Bar ($\leq$ DN1000)

Temperature:

-10° C to +150°C



HG
Heavy Duty
High Pressure Slurry
Knife Gate Valve

Ductile iron or stainless steel body, stainless steel gate, two rubber sleeves and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: Up to DN900

Pressure:

- 50 Bar ($\leq$ DN600)
- (20 Bar ($\leq$ DN900))

Temperature:

-10° C to +150°C



ET
Uni-directional
MSS SP-81
Knife Gate Valve

Stainless steel monoblock body and gate, different seat materials (metal, EPDM) and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: DN50 to DN900

Pressure:

- 10 Bar (DN600)
- 7 Bar (DN900)

Temperature:

-20° C to +250°C



BT
Bi-directional
MSS SP-81
Knife Gate Valve

Stainless steel body and gate, different seat materials (metal, EPDM) and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: DN50 to DN900

Pressure:

- 10 Bar (DN600)
- 7 Bar (DN900)

Temperature:

-20° C to +250°C



HB
Bi-directional
High Pressure
Shear Knife Gate Valve

Ductile Iron body, full bore. Optional Tungsten carbide coating and wear rings. Gate stainless steel.

Specifics

Size: DN80 to DN600

Pressure:

- 20 Bar (DN600)

Temperature:

-20° C to +200°C



EP
Bi-directional
Polyurethane-lined
Knife Gate Valve

Ductile iron monoblock body with polyurethane lining, stainless steel gate and various actuation solutions (manual, pneumatic, electric).

Specifics

Size: Up to DN600

Pressure:

- 10 Bar (DN600)

Temperature:

-10° C to +100°C



PA
Heavy Duty
Slurry Pinch Valve

Ductile iron cast split body, full bore rubber sleeve with single and double pinch operating design and various actuation solutions (manual and pneumatic).

Specifics

Size: From DN25 to DN300

Pressure:

- 10 Bar (DN150) / 8, 5 (DN200)
- / 7 Bar (DN250) / 6 Bar (DN300)

Temperature:

-10° C to +150°C

GATE

Made of stainless steel, polished on both sides and of rectangular shape, the bottom of the gate is machined to an edge. These features, together with a controlled stroke, minimise friction as the gate travels through the rubber sleeves, reducing the valve operating torque and sleeve wear, ensuring optimum slurry isolation.

PACKING

The maintenance free EPDM standard gland packing for VG/WG valves is self-adjusting and prevents both leakage to the exterior and contamination of the interior of the valve in any installation position.

Conventional 100% tight packing with several layers of braided fibre and an EPDM o-ring is standard for HG valve and available for VG/WG valves.

ACTUATOR

The reinforced actuator support, manufactured in a single piece, is easily interchangeable and includes open/closed lock-outs as a standard feature for maintenance operations. It is finished with an electrostatically applied EPOXY coating. The piston rods of pneumatically or hydraulically actuated valves include bellows (rod boots) as a standard feature to protect against outside contamination and dirt.

BODY

Wafer style VG and wide face-to-face distance WG/HG available. The body is a single cast/fabricated part (mono-block) design and maintenance free. The open design of the lower part of the valve allows the discharge of the slurry that has entered the body when closing or opening the valve, assuring a full gate closure. Splash guards can be optionally provided to convey this slurry media to a drain line. Flushing ports can also be added to improve the evacuation of this slurry media from the body.

SEAT/SLEEVES

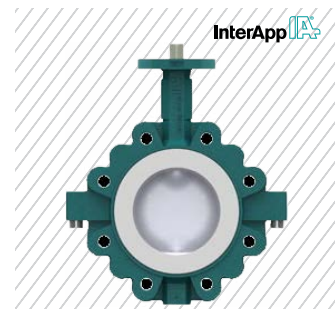
Robust 1 piece design, the chemical composition and the vulcanizing process used in their production assures maximum flexibility and the absence of cavities where solids can accumulate.



ORBINOX
VALVE SOLUTIONS IN MORE THAN 70 COUNTRIES

BUTTERFLY VALVES

WHERE SAFETY IS ESSENTIAL



**Bianca
Centric
Butterfly Valve**

Fluoroplastic lined for shut-off and control service for aggressive or corrosive fluid applications. Wafer, lugged and U flanged body.

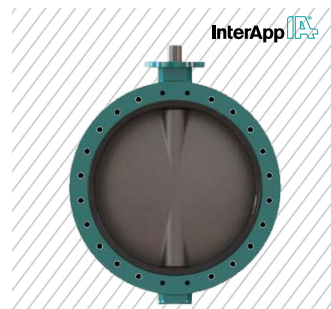
Specifics

Size: DN32 to DN900

Pressure:

- 16 Bar ($\leq$ DN300)
- 10 Bar ($\leq$ DN 600)
- 6 Bar ($\leq$ DN 900)

Temperature: -20°C to +200°C



**Desponia
Centric
Butterfly Valve**

Elastomer liner. Wafer, lugged and U flanged body. Ductile iron body and stainless steel available, bonded liner - option.

Specifics

Size: DN25 to DN1600

Pressure:

- 16 Bar ($\leq$ DN1200)
- 10 Bar ($\leq$ DN1600)
- 20 Bar ($\leq$ DN600 on request)

Temperature: -40°C to +200°C



**Elara
Double Eccentric
Butterfly Valve**

High performance HP butterfly valve, lugged and wafer."

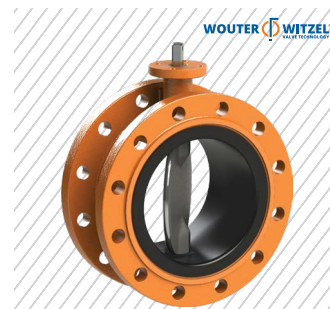
Specifics

Size: DN50 to DN600

Pressure:

- Cl150 -300

Temperature: -10°C to +400°C



**EV
Centric
Butterfly Valve**

Vulcanised elastomer liner. Wafer, lugged abd U flanged body and double flanged body. Ductile iron body.

Specifics

Size: DN50 to DN2400

Pressure:

- 16 Bar ($\leq$ DN2400)
- 25 Bar ($\leq$ DN1200)

Temperature: -20°C to +200°C



**HP
Double Eccentric
Butterfly Valve**

High performance HP butterfly valve, lugged, wafer and double flanged.

Specifics

Size: DN50 to DN600

Pressure:

- Cl150 -300

Temperature: -200°C to +260°C



**Triple Offset
Butterfly Valve**

Triple eccentric, metal seated butterfly valve, flanged, lugged, wafer and double flanged, BW.

Specifics

Size: DN80 to DN 600

Pressure:

- Cl150 -600

Temperature: -200°C to +815°C

ISO top flange for modular actuator mounting.

High-performance self-lubricating and maintenance-free bushing.

Reliable shaft sealing system:

- Safety shaft sealing
- High liner collar
- Shaft PFA overmolded.

Increased service life thanks to the chambered liner which prevents cold flow at the flange sealing surface.

Centering holes covering multiple flange ratings.

External shaft sealing to protect the valve neck hole.

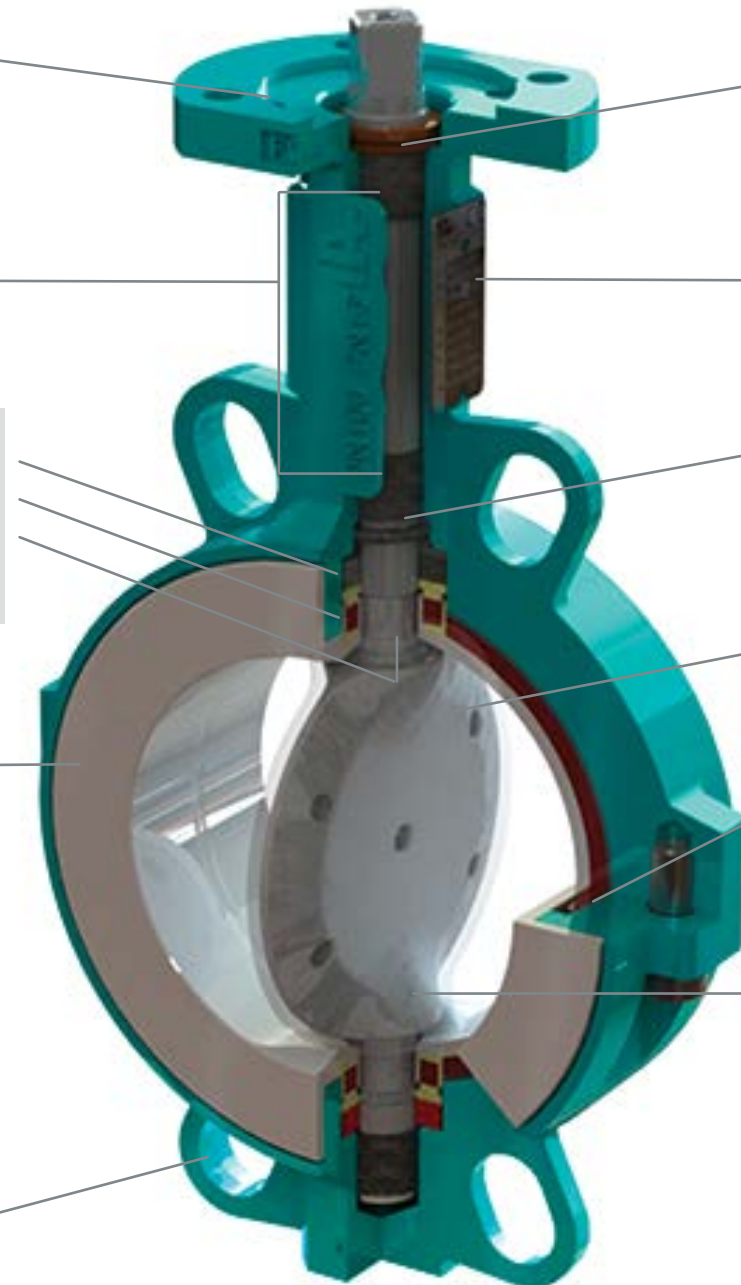
Stainless steel valve label according to EN 19 for full traceability.

Optional TA-luft packing.

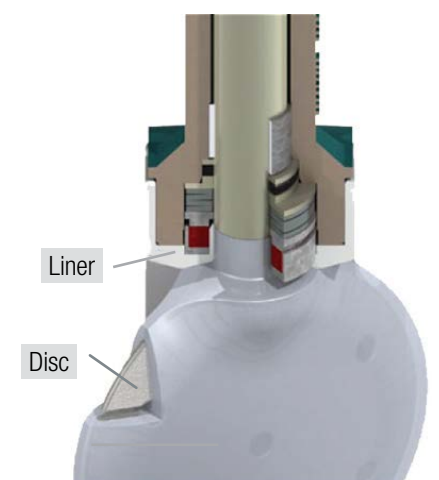
Low friction and extended service life thanks to PTFE liner in combination with PFA-overmolded disc.

Minimum deformation of the liner due to the elastomer backliner embedded in the body.

Blow-out proof shaft and excellent Kv values based on the one piece disc/shaft.



IA[®]
InterApp



HIGHEST QUALITY FOR TOUGH ENVIRONMENTS

BALL VALVES

OPERATION, ACTION AND CONTROLS

- Lever
- Worm gear
- Pneumatic Actuators
- Electric Actuators
- Hydraulic Actuators

DESIGN PRESSURE

- 16 bar / 232 psi

BODY MATERIAL

- Nodular cast iron
- Steel cast
- Stainless steel cast
- Aluminium bronze/bronze

BODY

- Double flanged type

FACE TO FACE (BUILDING LENGTH)

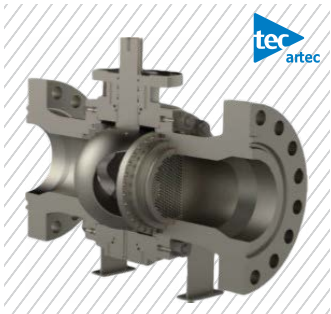
- Face to Face according to EN558 S13 or S14

FLANGE PATTERN

- ISO, PN 6 / PN 10 / PN16
- JIS, 5K /10K /16K
- Available in AS4087

CONSTRUCTION

- Centric butterfly valve with bonded vulcanised rubber lining



VariTec Control and Shut Ball Valve

3-piece forged, trunnion mounted metal to metal or soft seated. Ball/Seat Hard facing: tungsten carbide, plasmanitrated (metal-to-metal), nickel plated (soft seated) soft sealing inlay (PTFE, PEEK, others).

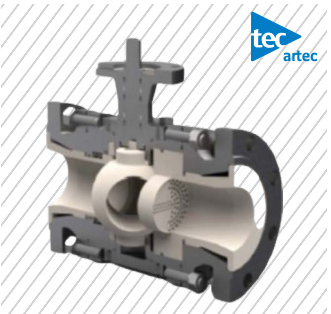
Specifics
Size: DN25 - DN800
Pressure: • CL150 - 2500
Temperature: -196°C - +600°C



Floating Ball Valve

Robust heavy duty design with multiple stem and ball sealing systems, forged solid ball, API6D. Wafer, flanged, threaded end connections.

Specifics
Size: DN8 to DN200
Pressure: • CL150 - 1500
Temperature: -29° C to +200°C



VariTec Ceramic Ball Valve

Control and Shut Off. Trunnion mounted, forged body made from A105, 316 titanium, 321 stainless steel, duplex, super duplex, full or reduced bore. Lever, gearbox, electric, pneumatic or hydraulic operation.

Specifics
Size: 25mm to 300mm
Pressure: • < CL150
• < PN25
Temperature: Max 610°C



Mining Project
Whyalla, South Australia
Orbinox Knifegate Valves



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Expect... **AVR**

