VALVE SOLUTIONS FOR POWER GENERATION PLANTS

AVK INDUSTRIAL VALVES





AVK INDUSTRIAL VALVES





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AVK INDUSTRIAL VALVES

HIGH PERFORMANCE & HIGH QUALITY VALVES



FOR EVERY TYPE OF POWER GENERATING PLANT, AVK INDUSTRIAL VALVES CAN
DELIVER BOTH HIGHLY SPECIALIZED ENGINEERED PRODUCTS AS WELL AS STANDARD
PRODUCTS, THAT MEET THE STANDARDS, APPROVALS, PERFORMANCE AND QUALITY
AS REQUIRED WITHIN POWER GENERATING PLANTS WORLD WIDE.

The AVK Group of Industrial Valve Manufacturing Companies have many years of experience in design, development and production of valves for the power generating industry. The products are tested and approved before delivery, and full documentation, material certificates and installation and maintenance instructions are available for each product supplied.

Many of the products are designed and produced for maintenance free use, and for those products where regular maintenance is required, designed for easy maintenance and service.



FOSSIL ENERGY



NUCLEAR ENERGY



HYDRO ENERGY



GEOTHERMAL ENERGY



BIOMASS ENERGY

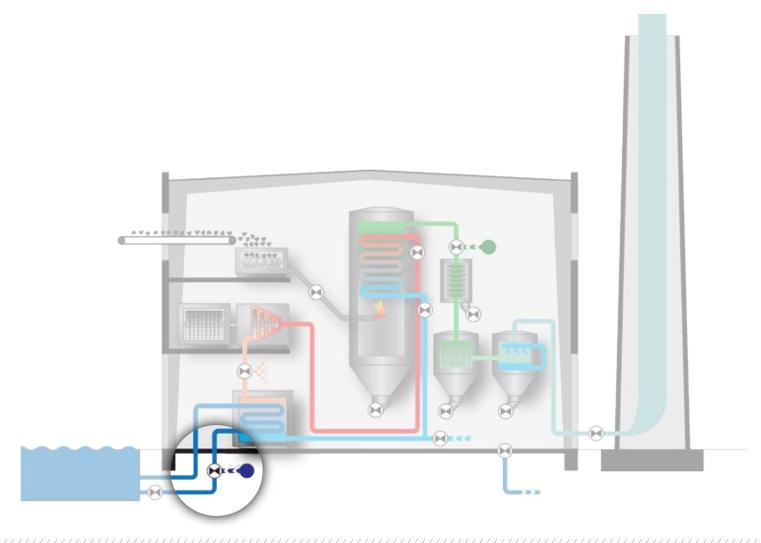
WATER INTAKE SYSTEMS

		AV K	InterApp	WW EuroValve	Warts Febre	ORBINOX	Okunindd	ter
1	High performance butterfly valves			*	€			
2	Centric butterfly valves with loose or fixed liner			Ö	•			
3	Double eccentric butterfly valves	19		Ö.				
4	Full bore ball valves High pressure ball valves							
5	Knife gate valves							
6	Penstocks wall mounted or channel mounted							
7	Gate valves							
8	Check valves							



















High performance butterfly valves

Double eccentric design. Available in many highquality materials. Available as wafer, lugged and double flanged type.

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated. Wafer, lug, monoflanged and doubleflanged design.

Centric butterfly valves

Ductile iron or carbon steel body.
Shaft in stainless steel Disc

Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, u-section, single flange and double flange.

Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Specifics:

Size:

DN50 - DN900

Pressure: 20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Size:

Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Wafer/lug type:

Size:

DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C / -40 to +200°C

Specifics:

Size:

DN50 - DN2200

Pressure:

Up to 25 Bar

Temperature: Up to +150°C

Specifics:

Size:

Up to DN2000

Pressure: Full vacuum to 20 Bar

Temperature: -30 to +200°C

WATER INTAKE SYSTEMS











Flanged double eccentric butterfly valves

Body and disc in ductile iron. Shaft, and pins in Stainless Steel. Fusion bonded epoxy coating acc to GSK.

Full bore ball valves

Body and ball in stainless steel. Seats in PTFE. Manually pneumatically or electrically operated.

High pressure ball valves

Soft and metal seated On/off and control function Custom made

General service knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size:

DN200 - DN2200

Pressure:

10 + 16 + 25 Bar

Temperature: 0 to +70°C

Specifics:

Size:

DN15 - DN100

Pressure: Up to 63 Bar

Tomporatura:

Temperature: Up to +650°C

Specifics:

Size:

DN25 - DN1000

Pressure:

From 16 Bar to 420 Bar

Temperature:

Up to +550°C

Specifics:

Size:

Up to DN1200

Pressure:

10 Bar (DN250) / 6 Bar (DN450) / 5 Bar (DN600) / 2 Bar (DN1200)

Temperature:

-20°C to +250°C









Bidirectional knife gate valve

Cast iron or stainless steel body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Wall mounted penstock

Four-side sealing. Stainless steel frame and gate, EPDM seals, HMWPE guides and various actuation solutions (manual, pneumatic, electric, etc.)

Channel penstock

Three-side sealing. Stainless steel full frame and gate, EPDM seals, HMWPE guides and various actuation solutions (manual, pneumatic, electric, etc.)

Weir penstock

Three- or four-side sealing downward opening. Stainless steel frame and gate, EPDM seals and HMWPE guides, bidirectional and with various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size: Up to DN1200

10 Bar (DN250) / 6 Bar (DN450) /

5 Bar (DN600) / 2 Bar (DN1200)

Temperature: -20°C to +200°C

Specifics:

Size: Up to 3000 x 3000 mm

Pressure:

1 Bar On / 0,6 Bar Off

Temperature: 0 to +70°C

Specifics:

Size:

Up to 3000 x 3000 mm

Pressure: Gate height

Temperature: 0 to +70°C

Specifics:

Size:

Up to 3000 x 3000 mm

Pressure: Gate height

Temperature: 0 to +70°C









Metal seated gate valves

Metal seated gate valve for isolation. Double Flanged

Large diameter resilient seated gate valve

Body and bonnet in ductile iron. Stem in stainless steel. Wedge in ductile iron. Operated by gearbox and hand wheel or actuator.

Swing check Valves

Body and bonnet in ductile iron. Stem and hinge in stainless steel. Lever and weight or lever and spring.

Recoil Check Valves

Metal seated high performance, fast acting, non slam check valve.

Specifics:

Size:

DN50 - DN1800

Pressure:

10 + 16 Bar

(25 Bar available in certain sizes)

Temperature:

0 to +70°C

Specifics:

Size:

DN700 - DN800

Pressure:

Up to 16 Bar

Temperature: 0 to +70°C

Specifics:

Size:

DN50 - DN600

Pressure:

Up to 16 Bar

Temperature: 0 to +70°C

Specifics:

Size:

DN50 - DN1400

Pressure:

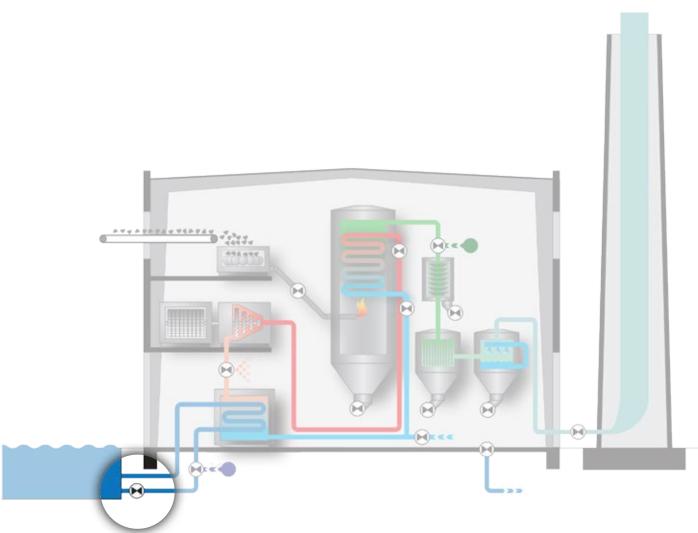
10 + 16 + 25 Bar

Temperature:

0 to +70°C

WATER TREATMENT

		AV R	InterApp	WW Euro Valve	Wy Wartst Fatre	ORBINOX	Claufield	tes
1	High performance butterfly valves			Ö.	€			
2	Centric butterfly valves with loose or fixed liner			Ó	5 9			
3	Double eccentric butterfly valves	1						













High performance butterfly valves

Double eccentric design. Available in many highquality materials. Available as wafer, lugged and double flanged type.

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated. Wafer, lug, monoflanged and doubleflanged design.

Centric butterfly valves

Ductile iron or carbon steel body.

Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, u-section, single flange and double flange.

Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Specifics:

Size:

DN50 - DN900

Pressure: 20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Wafer/lug type:

DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C /

Specifics:

Size: DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C

Specifics:

Up to DN2000

Pressure: Full vacuum to 20 Bar

Temperature: -30 to +200°C



Flanged double eccentric butterfly valves

Body and disc in ductile iron. Shaft, and pins in Stainless Steel. Fusion bonded epoxy coating acc to GSK.

Specifics:

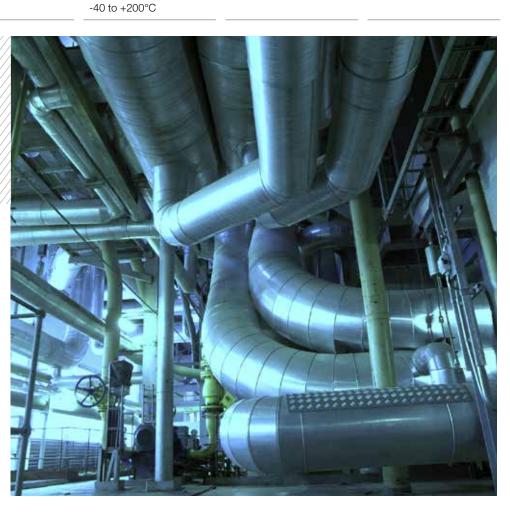
Size:

DN200 - DN2200

Pressure:

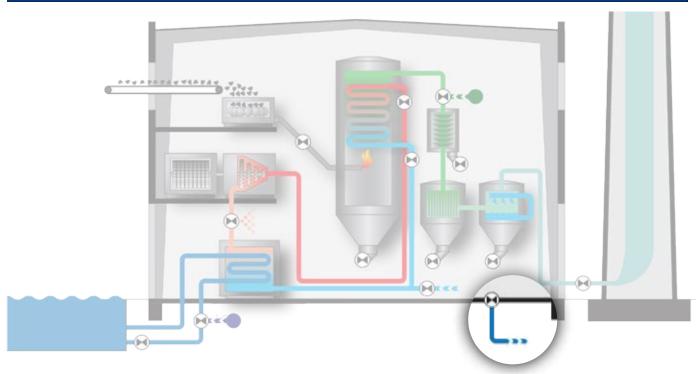
10 + 16 + 25 Bar

Temperature: 0 to +70°C



FLOOR DRAINS

			oraș.		~			
			InterApp	WW Euro Valve	Warts False	ORBINOX	Clemfield	tec
1	High performance butterfly valves			(6)				
2	Double eccentric butterfly valves	(3)						
3	Centric butterfly valves with loose or fixed liner			Ò				
4	Full bore ball valves High pressure ball valves							
5	Knife gate valves: -Unidirectional -Bidirectional with actuator (electric or pneumatic) - Unidirectional, metal seated							













High performance butterfly valves

Double eccentric design. Available in many highquality materials. Available as wafer, lugged and double flanged type.

Double eccentric high performance **butterfly valves**

Body and trim materials to customer requirements. Teflon or NBR seated. Wafer, lug, monoflanged and doubleflanged design.

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, u-section, single flange and double flange.

Centric butterfly valves

Ductile iron or carbon steel Shaft in stainless steel Disc

in ductile iron, or in stainless steel. Loose liner in EPDM.

Flanged double eccentric butterfly valves

Body and disc in ductile

Shaft, and pins in Stainless Steel. Fusion bonded epoxy coating acc to GSK.

Specifics:

Size: DN50 - DN900

Pressure: 20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Size: Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Specifics:

Size: DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to 150°C

Wafer/lug type:

Size: DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C / -40 to +200°C

Specifics:

Size:

DN200 - DN2200

Pressure: 10 + 16 + 25 Bar

Temperature: 0 to +70°C



Full bore ball valves

Body and ball in stainless steel. Seats in PTFE. Manually pneumatically or electrically operated.



General service knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)



Bidirectional knife gate valve

Cast iron or stainless steel body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)



Knife gate valve acc to MSS SP-81

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



Bidirectional knife gate valve acc to MSS SP-81

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

Specifics:

Size: DN15 - DN100

Pressure: Up to 63 Bar

Temperature: Up to +650°C

Specifics:

Size: Up to DN1200

Pressure:

10 Bar (DN250) /

6 Bar (DN450) / 5 Bar (DN600) /

2 Bar (DN1200)

Temperature: -20 to +250°C

Specifics:

Size: Up to DN1200

Pressure: 10 Bar (DN250) / 6 Bar (DN450) / 5 Bar (DN600) /

2 Bar (DN1200) Temperature: -20°C to +200°C

Specifics:

Size: Up to DN36"

Pressure: 10 Bar (DN24") /

7 Bar (DN36")

Temperature: -20°C to +250°C

Specifics:

Size:

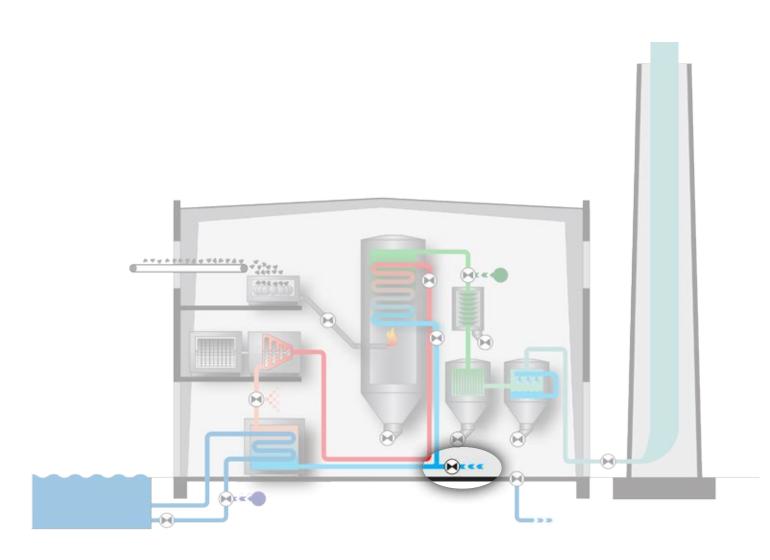
Up to DN36"

Pressure: 10 Bar (DN24") / 7 Bar (DN36")

Temperature: -20° C to +200°C

BOILER FEED WATER & CONDENSATE WATER SYSTEM

		AV R	InterApp	WW Euro Valve	Wy Warts-Telen	ORBINOX	Claufiold	te artec
High perfo	ormance alves			*				
Full bore to High pressiball valves	sure							









High performance butterfly valves

Double eccentric design. Available in many high-quality materials. Available as wafer, lugged and double flanged type.

Specifics:

Size: DN50 - DN900

Pressure:

20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated. Wafer, lug, monoflanged and doubleflanged design.

Specifics:

Size: Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

High pressure ball valves

Soft and metal seated On/off and control function Custom made

Specifics:

Size:

DN25 - DN1000

Pressure:

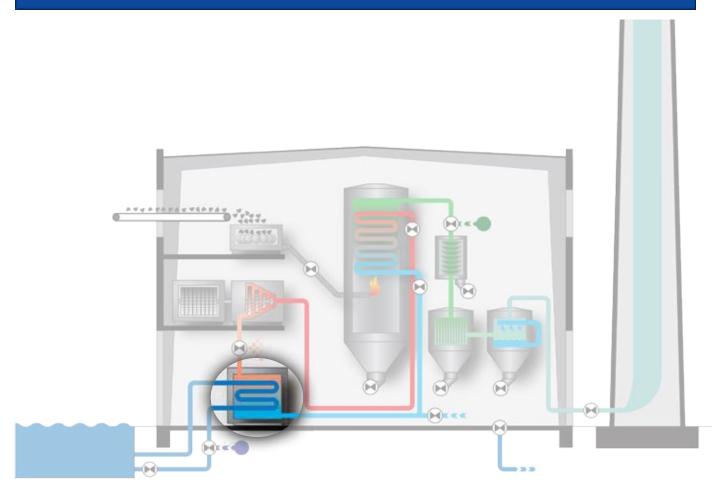
From 16 Bar to 420 Bar

Temperature: Up to +550°C



COOLING WATER SYSTEMS

		AV K	InterApp	WW EuroValve	Wu View Walne	ORBINOX	Clamiteld	tec
1	High Performance butterfly valves			Ö	€			
2	Double eccentric butterfly valves	13						
3	Centric butterfly valves with loose or fixed liner			Ó	•			
4	Full bore ball valves High pressure ball valves							











High performance butterfly valves

Double eccentric design. Available in many high-quality materials. Available as wafer, lugged and double flanged type.

Specifics:

Size:

DN50 - DN900

Pressure:

20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated.

Wafer, lug, monoflanged and doubleflanged design.

Specifics:

Size:

Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Flanged double eccentric butterfly valves

Body and disc in ductile iron. Shaft, and pins in Stainless Steel. Fusion bonded epoxy coating acc to GSK.

Specifics:

Sizo.

DN200 - DN2200

Pressure:

10 + 16 + 25 bar

Temperature: 0 to +70°C

Centric butterfly valves

Ductile iron or carbon steel body. Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Wafer/lug type:

Size

DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C / -40 to +200°C









Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, usection, single flange and double flange.

Specif

Size:

DN50 - DN2200

Pressure: Up to 25 Bar

Specifics:

Temperature: Up to +150°C

Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Specifics:

Size:

Up to DN2000

Pressure:

Full vacuum to 20 Bar

Temperature: -30 to +200°C

Full bore ball valves

Body and ball in stainless steel. Seats in PTFE. Manually pneumatically or electrically operated.

Specifics:

Size:

DN15 - DN100

Pressure: Up to 63 Bar

- -

Temperature: Up to +650°C

High pressure ball valves

Soft and metal seated On/off and control function Custom made

Specifics:

Size:

DN25 - DN1000

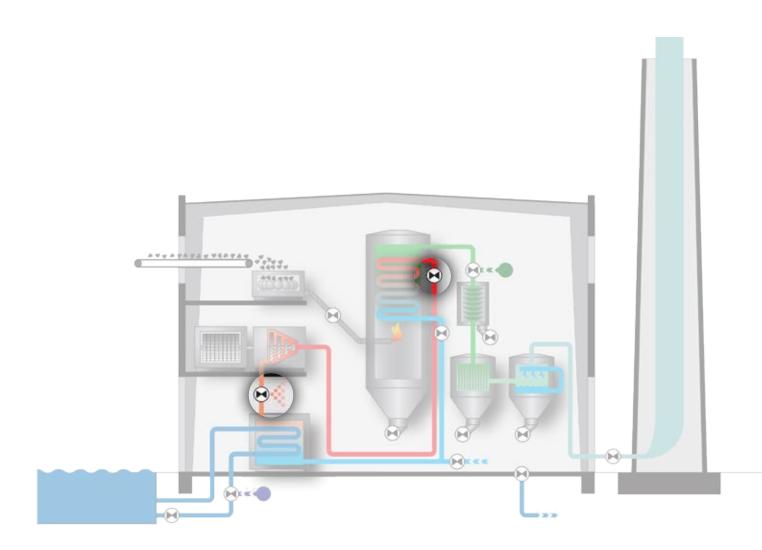
Pressure:

From 16 Bar to 420 Bar

Temperature: Up to +550°C

STEAM TEMPERATURE CONTROL

		InterApp	WW EuroValve	Wy World Halve	ORBINOX	Clemfield	tec
1	Desuperheater						
2	Steam conversion station						
3	Motive steam nozzle						Ţ









Desuperheater valve

Steam temperature control by injecting boiler feed water Control range 1:50 standard Control range 1:2500 HT version

Steam conversion valve

Steam pressure and temperature control.

Safety function acc. to TRD421

Motive steam nozzle

Steam temperature control near saturation curve.
Custom made

Specifics:

Size:

DN200 - DN1000

Pressure: 25 – 400 Bar

Temperature: Up to +750°C

Specifics:

Size:

DN50 - DN2000

Pressure:

25 – 400 Bar

Temperature: Up to +580°C

Specifics:

Size:

DN200 - DN2000

Pressure:

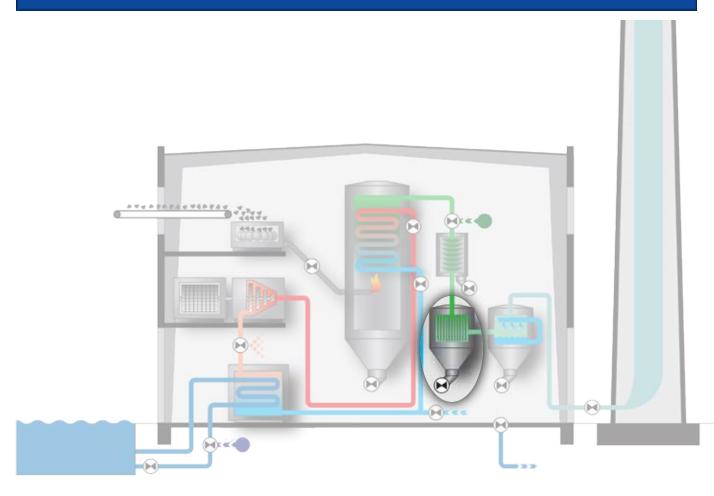
Up to 400 Bar

Temperature: Up to +750°C



CHEMICAL SERVICES

	AV K	InterApp	WW Euro Valve	Wy Wartst-Valve	ORBINOX	Olsmiteld	tec
High performance butterfly valves			Ö	€			
Centric butterfly valves with loose or fixed liner			Ò	0			
Full bore ball valves High pressure ball valves							











High performance butterfly valves

Double eccentric design. Available in many high-quality materials. Available as wafer, lugged and double flanged type.

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated. Wafer, lug, monoflanged and doubleflanged design.

Centric butterfly valves

Ductile iron or carbon steel body. Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Centric butterfly valves

Body in ductile iron Shaft and disc in stainless steel, PFA lined. Liner in PTFE. Manually pneumatically or electrically operated

Specifics:

Size:

DN50 - DN900

Pressure:

20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Size: Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Wafer/lug type:

Sizo.

DN25 - DN1600 /

DN25 - DN600

Pressure:

Up to 16 Bar / Up to 20 Bar

Temperature:

-50 to +140°C / -40 to +200°C

Specifics:

Size:

DN32 - DN900

Pressure:

2.5 - 16 bar

Temperature: -20°C to +200°C









Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, usection, single flange and double flange.

Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

High pressure ball valves

Soft and metal seated On/off and control function Custom made

Ceramic ball valves

Ceramic inner parts
On/off and control function
Custom made

Specifics:

Size

DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C

Specifics:

Size

Up to DN2000

Pressure:

Full vacuum to 20 Bar

Temperature:

-30 to +200°C

Specifics:

Size:

DN25 - DN1000

Pressure:

From 16 Bar to 420 Bar

Temperature:

Up to +550°C

Specifics:

Size

DN25 - DN250

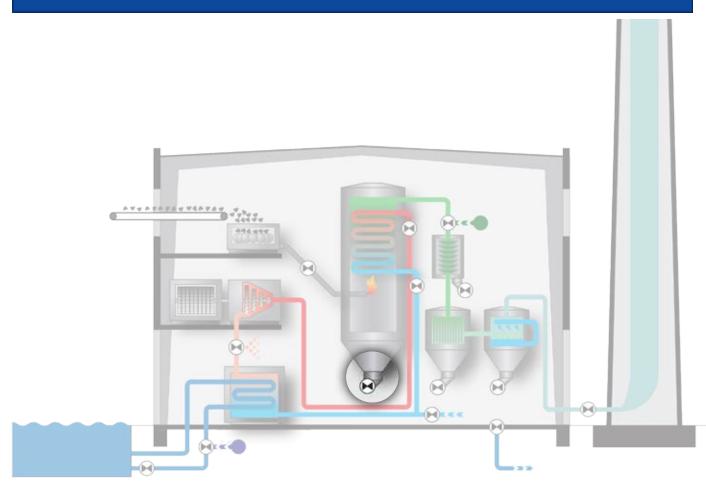
Pressure:

Up to 16 Bar

Temperature: Up to +200°C

ASH & CLINKER REMOVAL SYSTEM

		AV R	InterApp	WW Euro Valve	Wy Warts-Taken	ORBINOX	Claudiold	tec
1	Knife gate valves: -Unidirectional -Bidirectional with actuator (electric or pneumatic) - Unidirectional, metal seated							Political Parallel
2	Full bore ball valves High pressure ball valves							
3	Centric butterfly valve with fixed liner			Ò				











General service knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size: Up to DN1200

Pressure:

10 Bar (DN250) / 6 Bar (DN450) / 5 Bar (DN600) / 2 Bar (DN1200)

Temperature: -20 to +250°C

Knife gate valve acc to MSS SP-81

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

Specifics:

Size: Up to DN36"

Pressure:

10 Bar (DN24") / 7 Bar (DN36")

Temperature: -20°C to +250°C

Hopper shape knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size: Up to DN600

Pressure:

3 Bar (DN250) / 2 Bar (DN400) 5 Bar (DN600) / 2 Bar (DN1200)

Temperature: -20° C to +550°C

Square port fabricated knife gate galve

Carbon steel or stainless steel body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size:

Up to 1200 x 1200 mm

Pressure: 1 Bar

Temperature: -20° C to +550°C









Full bore ball valves

Body and ball in stainless steel. Seats in PTFE. Manually pneumatically or electrically operated.

High pressure ball valves

Soft and metal seated On/off and control function Custom made

Metal seated ball valves

Tungsten carbide coating, On/off and control function Custom made

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, usection, single flange and double flange.

Specifics:

Size:

DN15 - DN100

Pressure: Up to 63 Bar

Temperature: Up to +650°C

Specifics:

Size:

DN25 - DN1000

Pressure

From 16 to 400 Bar

Temperature: Up to +550°C

Specifics:

Size:

DN25 - DN600

Pressure:

From 16 to 420 Bar

Temperature: Up to +550°C

Specifics:

Size

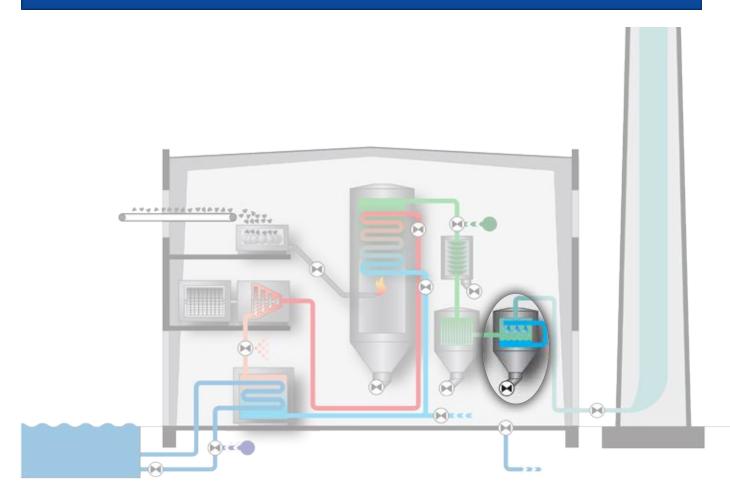
DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C

SCRUBBER SLURRY HANDLING

	TAVK	InterApp	WW DEuro Valve	Wurks Halon	ORBINOX	Claufield	ter
Full bore ball valves Full bore ball valves	/es						
Centric butterfly valves with loose or fixed lin			Ó	•			
Knife gate valves -Unidirectional -Bidirectional with actuator (electric or pneul - Unidirectional, metal seated							













Centric butterfly valves

Ductile iron or carbon steel body. Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Full bore ball valves

Body and ball in stainless steel. Seats in PTFE. Manually pneumatically or electrically operated.

High pressure ball valves

Soft and metal seated On/off and control function Custom made.

Ceramic and metal seated ball valves

Ceramic parts Tungsten carbide coating, On/off and control function

Rubber lined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, u-section, single flange and double flange.

Wafer/lug type:

Size:

DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C / -40 to +200°C

Specifics:

Size:

DN15 - DN100

Pressure: Up to 63 Bar

Temperature: Up to +650°C

Specifics:

Size:

DN25 - DN1000

Pressure: From 16 to 400 Bar

Temperature: Up to +550°C

Specifics:

Size:

DN25 - DN250/DN1000

Pressure: From 16 to 420

Temperature: Up to +200°C/+550°C

Specifics:

Size:

DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C









Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Slurry knife gate valve

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

General service

Cast iron or stainless steel

Bidirectional knife gate valve

Cast iron or stainless steel body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Bidirectional knife gate valve acc to MSS SP-81

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

Specifics:

Up to DN2000

Pressure: Full vacuum to 20 Bar

Temperature: -30 to +200°C

Specifics:

Up to DN1200

Pressure:

10 Bar (DN600) / 5 Bar (DN1200)

Temperature:

-20° C to +200°C

knife gate valve

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

Specifics:

Up to DN1200

Pressure:

10 Bar (DN250) /

6 Bar (DN450) /

5 Bar (DN600) /

2 Bar (DN1200)

Temperature: -20 to +250°C

Specifics:

Up to DN1200

Pressure:

10 Bar (DN250) /

6 Bar (DN450) /

5 Bar (DN600) /

2 Bar (DN1200) Temperature:

-20°C to +200°C

Specifics:

Up to DN36"

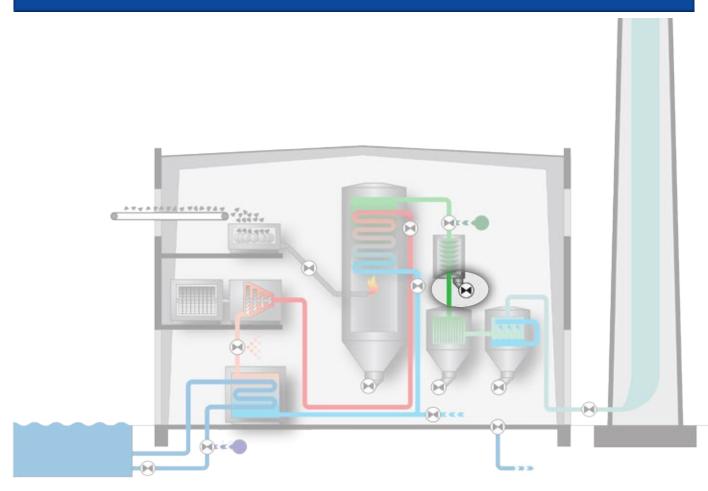
Pressure:

10 Bar (DN24") / 7 Bar (DN36")

Temperature: -20° C to +200°C

FILTERING SYSTEMS

		InterApp	WW EuroValve	Wy Warks - Valve	ORBINOX	Claufield	tes artes
1	High performance butterfly valves		Ö.	€			
2	Dampers						
3	Centric butterfly valves with loose or fixed liner			5 0			











High performance butterfly valves

Double eccentric design. Available in many high-quality materials. Available as wafer, lugged and double flanged type.

Double eccentric high performance butterfly valves

Body and trim materials to customer requirements. Teflon or NBR seated.

Wafer, lug, monoflanged and doubleflanged design.

Butterfly damper

Carbon or stainless steel fabricated body and blade, rigid ledge or flexible seal and various actuation solutions (manual, pneumatic, electric)

Louver damper

Carbon or stainless steel fabricated, parallel or opposed blades, rigid ledge or flexible seal and various actuation solutions (manual, pneumatic, electric)

Specifics:

Size:

DN50 - DN900

Pressure:

20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Size:

Up to DN1200

Pressure: Full vacuum to 25 Bar

Temperature: -50 to +230°C

Specifics:

Size:

Up to DN3000

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C

Specifics:

Size:

Up to 10000 x 10000 mm

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C



Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Specifics:

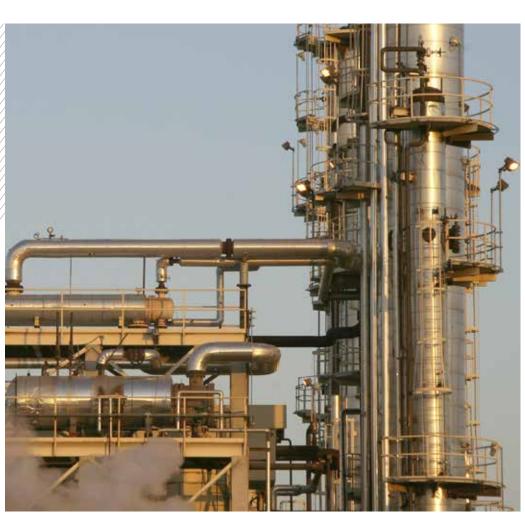
Size:

Up to DN2000

Pressure:

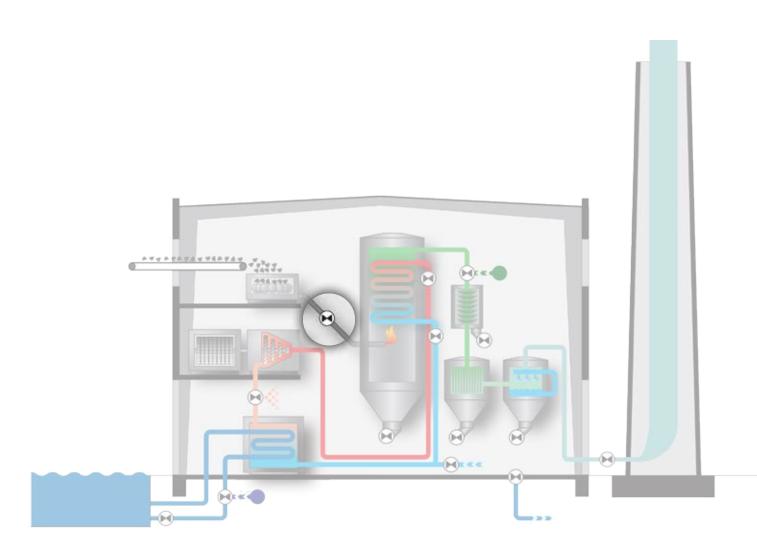
Full vacuum to 20 Bar

Temperature: -30 to +200°C



COAL BURNER ISOLATION

	AV K	InterApp	WW DEuro Valve	W _V	ORBINOX	Clamitold	ter
Knife gate valves: -Unidirectional -Bidirectional with actuator (electric or pneumatic) - Unidirectional, metal seated							





Coal burner line knife gate valve (ATEX Cat. I & DIN 14460)

Ductile iron split body, stainless steel gate, viton seat and various actuation solutions (manual, pneumatic, electric, etc.)

General service knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Coal burner line knife gate valve (NFPA 85)

Full flanged -MSS SP 81 face to face- KGV. Ductile iron body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Through conduit knife gate valve

Cast iron or stainless steel split body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size:

Up to DN1000

Pressure:

2 Bar (10 Bar explosion)

Temperature: -20° C to +200°C

Specifics:

Size:

Up to DN1200

Pressure:

10 Bar (DN250) / 6 Bar (DN450) / 5 Bar (DN600) / 2 Bar (DN1200

Temperature: -20 to +250°C

Specifics:

Size:

Up to DN1200

Pressure:

10 Bar (DN24") / 7 Bar (DN36")

Temperature: -20° C to +550°C

Specifics:

Size:

Up to DN1000

Pressure:

10 Bar (DN125) / 8 Bar (DN250) 6 Bar (DN400) / 5 Bar (DN450) 4 Bar (DN600) / 2 Bar (DN1000)

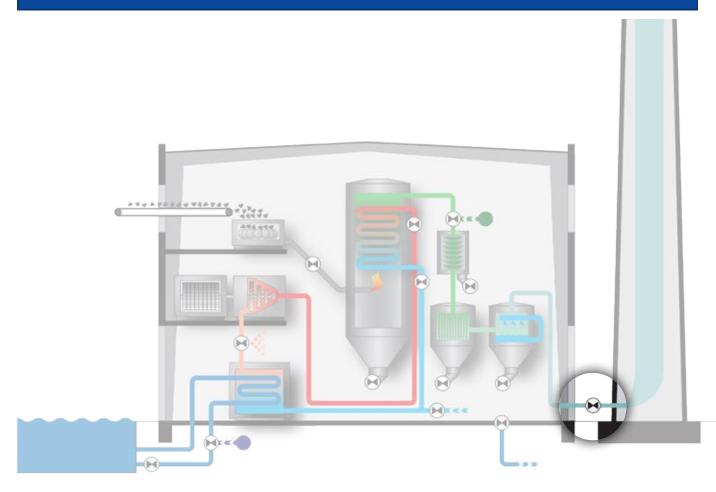
Temperature:

-20° C to +550°C



FLY ASH HANDLING SYSTEMS

		AV K	InterApp	WW DEuro Valve	Wurki Halve	ORBINOX	Clamiteld	ter
1	Knife gate valves: -Unidirectional -Bidirectional with actuator (electric or pneumatic) - Unidirectional, metal seated							
3	Swing Disc							
4	Centric butterfly valves with loose or fixed liner				0			











General service knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size:

Up to DN1200

Pressure:

10 Bar (DN250) / 6 Bar (DN450) / 5 Bar (DN600) / 2 Bar (DN1200)

Temperature:

-20 to +250°C

Hopper shape knife gate valve

Cast iron or stainless steel monoblock body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size: Up to DN600

Pressure:

3 Bar (DN250) / 2 Bar (DN400) 5 Bar (DN600) / 2 Bar (DN1200)

Temperature:

-20° C to +550°C

Square port fabricated knife gate galve

Carbon steel or stainless steel body, stainless steel gate, different seat materials (metal, EPDM,...) and various actuation solutions (manual, pneumatic, electric, etc.)

Specifics:

Size:

Up to 1200 x 1200 mm

Pressure:

1 Bar

Temperature: -20° C to +550°C

Ductile iron or carbon steel body. Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Centric **butterfly valves**

Wafer/lug type:

Size:

DN25 - DN1600 /

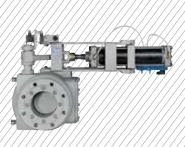
DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature:

-50 to +140°C /

-40 to +200°C





Swing disc valve

Cast iron body, metal-to-metal stellite reinforced seat and disc and pneumatic actuator

Specifics:

Size:

Up to DN300

Pressure: Max. 3 Bar

Temperature: Up to +200°C

centric butterfly valves

Rubber lined

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged with Super duplex/hastelloy and EPDM

Specifics:

Up to DN2000

Pressure:

Full vacuum to 20 Bar

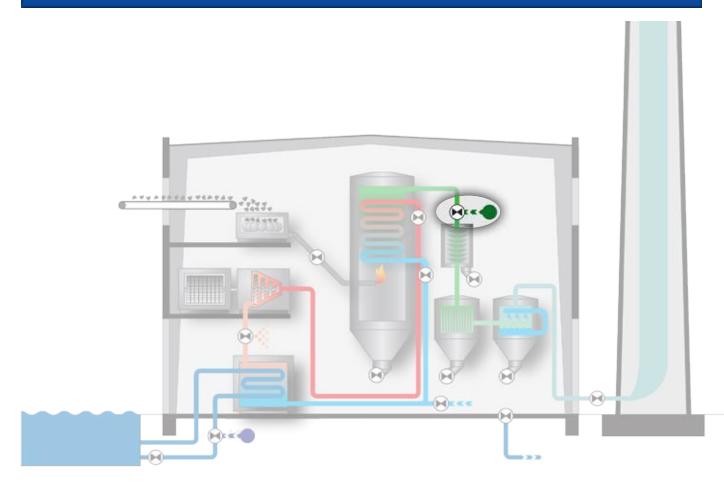
Temperature:

-30 to +200°C



BOILER & SCRUBBER GASES HANDLING

		InterApp	WW Euro Valve	Wurld-Falm	ORBINOX	Claufield	tec
1 de	ue Gas sulphuration stems		(
2 Da	ımpers						
3 va	entric butterfly Ives with ose or fixed liner		Ò	•			











Centric butterfly valves

Ductile iron or carbon steel body. Shaft in stainless steel Disc in ductile iron, or in stainless steel. Loose liner in EPDM.

Wafer/lug type:

Size:

DN25 - DN1600 / DN25 - DN600

Pressure: Up to 16 Bar / Up to 20 Bar

Temperature: -50 to +140°C / -40 to +200°C

High pressure ball valves

Soft and metal seated. On/off and control function. Custom made.

Alternative: Ceramic parts Tungsten carbide coating, On/off and control function

Specifics:

Size:

DN25 – DN1000 / DN25 – DN250/DN1000

Pressure: From 16 to 400 Bar / From 16 to 420 Bar

Temperature: Up to +550°C / Up to +200°C/+550°C

Louver damper

Carbon or stainless steel fabricated, parallel or opposed blades, rigid ledge or flexible seal and various actuation solutions (manual, pneumatic, electric)

Specifics:

Size:

Up to 10000 x 10000 mm

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C

T-duct damper

Carbon or stainless steel fabricated body and blades, rigid ledge or flexible seal and various actuation solutions (manual, pneumatic, electric)

Specifics:

Size:

Up to DN3000

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C











Butterfly damper

Carbon or stainless steel fabricated body and blade, rigid ledge or flexible seal and various actuation solutions (manual, pneumatic, electric)

Specifics:

Size:

Up to DN3000

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C

Guillotine damper

Carbon or stainless steel fabricated body and gate, rigid ledge seal and various actuation solutions (manual, pneumatic, electric)

Specifics:

Size:

Up to DN3000

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C

Stack damper

Carbon or stainless steel fabricated body and blades, rigid ledge or flexible seal and various actuation solutions (pneumatic, electric)

Specifics:

Size:

Up to DN7000

Pressure: Max. 0,5 Bar

Temperature: Up to +750°C

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semi-lug, tapped-lug, u-section, single flange and double flange.

Specifics:

Size

DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C

centric butterfly valves

Rubber lined

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Specifics:

Size:

Up to DN2000

Pressure:

Full vacuum to 20 Bar

Temperature: -30 to +200°C

HYDROPOWER PLANT

			InterApp	Wy World-Value	ORBINOX	Claufield	tec
1	Gate valves	AND					
2	Discharge valves						
3	Double eccentric butterfly valves						
4	Gates						
5	Knife gate valves						
6	Check valves						



Resilient seated gate valves

Body and bonnet in ductile iron. Stem in stainless steel. Wedge in ductile iron. Operated by gearbox and hand wheel or actuator.

Specifics:

DN40 - DN800

Pressure:

Up to 16 Bar

Temperature: 0 to +70°C



Metal seated gate valves

Metal seated gate valve for isolation. Double Flanged. (PN25 available in certain

Specifics:

DN50 - DN1800

Pressure: 10 + 16 Bar

Temperature:

0 to +70°C



Fabricated double eccentric **butterfly valve**

Carbon or stainless steel fabricated body and disc, elastomer seal and hydraulic or electric actuation

Specifics:

Up to DN3500

Pressure:

10 Bar (DN3500) / 16 Bar (DN2000) / 25 Bar (DN1000)

Temperature: Ambient



Free discharge valve

Terminal discharge valve providing atmospheric energy dissipation and flow control. Type - End of line single flanged

Specifics:

DN200 - DN1900

Pressure: Up to 16 Bar

Temperature: 0 to +70°C

Fixed cone valve

Carbon and stainless steel fabricated body and gate, elastomer seat and hydraulic or electric actuation.

Specifics:

Up to DN2500

Pressure: Up to 16 Bar

Temperature:

Ambient









Submerged discharge valves

Terminal discharge valve providing submerged energy dissipation and flow control. Type – End of line single flanged

Flanged double eccentric butterfly valves

Body and disc in ductile iron. Shaft, and pins in stainless steel. Fusion bonded epoxy coating acc to GSK.

Double eccentric butterfly valves

Double Eccentric butterfly valve with seal on disc design suitable for water applications. Type – Double flanged

High performance butterfly valves

Double eccentric design. Available in many high-quality materials. Available as wafer, lugged and double flanged type.

Rubber lined centric butterfly valves

Body, trim and seat materials to customer requirements. Wafer, lugtype, monoflanged and doubleflanged.

Roller gate

Carbon steel fabricated gate, roller system for guiding purposes, elastomer seals and hydraulic or electric actuation.

Specifics:

Size: DN200 – 1800 mm

Pressure: 10 + 16 Bar

Temperature: 0 to +70°C

Specifics:

Size: DN200 – DN2200

Pressure:

10 + 16 + 25 Bar

Temperature: 0 to +70°C

Specifics:

Size: DN200 – 2400

Pressure: 10 + 16 Bar

Temperature: 0 to +70°C

Specifics:

Size: DN50 – DN900

Pressure: 20 Bar (class 150) 50 Bar (class 300)

Temperature: Up to +250°C

Specifics:

Size: Up to DN2000

Pressure: Full vacuum to 20 Bar

Temperature: -30 to +200°C

Specifics:

Size:

Up to 6000 x 8000 mm

Pressure: Up to 10 Bar

Temperature: Ambient



Bulkhead gate

Carbon steel fabricated gate, elastomer seals, normally operated with auxiliary lifting equipment / crane.

Bonneted gate

Carbon or stainless steel fabricated body and gate, bronze seat and hydraulic or electric actuation.



High pressure ball valves

Soft and metal seated On/off and control function. Custom made



Fabricated high pressure knife gate valve

Carbon or stainless steel fabricated body and gate, elastomer or bronze seat and hydraulic or electric actuation.

Fabricated tilting check valve

Carbon or stainless steel fabricated body and disc, metal or elastomer seat and optional hydraulic damper and counterweight.

Specifics:

Size: Up to 15000 x 7000 mm

Radial gate

Carbon or stainless

hydraulic or electric actuation.

steel fabricated gate, elastomer seals and

Pressure: Gate height

Temperature: Ambient

Specifics:

Up to 15000 x 7000 mm

Pressure: Gate height

Temperature: Ambient

Specifics:

Up to 2500 x 3500 mm

Pressure: Up to 20 Bar

Temperature: Ambient

Specifics:

Size: DN25 – DN1000

Pressure: From 16 to 400 Bar

Temperature: Up to +550°C

Specifics:

Size: Up to DN3500

Pressure: Up to 20 Bar

Temperature: Ambient

Specifics:

Size: Up to DN2000

Pressure: Up to 16 Bar

Temperature: Ambient

FIRE PROTECTION

	AV K	InterApp	WW DEuro Valve	Wy Wartst Falve	ORBINOX	Claudiold	tec
1 Outdoor fire protection	T A		Ó				
2 Indoor fire Protection			Ó				













Dry barrel hydrant

Body, upper and lower barrel in ductile iron. Wedge in ductile iron vulcanized with AVK EPDM rubber. Stem in stainless steel. Stem rod in epoxy coated steel. Fusion bonded epoxy coating acc. to GSK, with UV resistant polyester top coat.

Specifics:

Size DN150

Pressure: 16.1 - 16.5 Bar

Temperature: 0 to +70°C

Dry barrel monitor hydrant

Body, upper and lower barrel, monitor elbow in ductile iron. Wedge in ductile iron vulcanized with AVK EPDM rubber. Stem in stainless steel. Stem rod in epoxy coated steel. Fusion bonded epoxy coating acc. to GSK, with UV resistant polyester top coat.

Size:

Temperature: 0 to +70°C

Telescopic post indicator

Body in ductile iron. Stem in galvanized steel. Fusion bonded epoxy coating acc. to GSK, with UV resistant polyester top coat

Flanged resilient seated post indicator gate valve

Body and bonnet in ductile iron. Stem in stainless steel Wedge in ductile iron vulcanized with AVK EPDM rubber. Fusion bonded epoxy coating acc. to GSK Operated by Post Indicator

Rubberlined butterfly valves

Complete range of butterfly valves in wafer, semilug, tapped-lug, u-section, single flange and double flange.

Specifics:

DN150

Pressure: 16.1 Bar

Specifics:

Size: DN100 - DN300

Pressure: 16 Bar

Temperature: -10 to +70°C

Specifics:

Size: DN80 - DN300

Pressure: 16 Bar

Temperature: Up to +70°C

Specifics:

Size:

DN50 - DN2200

Pressure: Up to 25 Bar

Temperature: Up to +150°C



Flanged resilient seated wrench nut gate valve

Body and bonnet in ductile iron. Stem in stainless steel. Wedge in ductile iron vulcanized with AVK EPDM rubber. Fusion bonded epoxy coating acc. to GSK. Operated by stem extension

Specifics:

Size:

DN65 - DN300

Pressure: 16 Bar

Temperature: 0 to +70°C



Flanged resilient seated gate valve OS&Y

Body, bonnet, yoke and hand wheel in ductile iron. Stem in copper alloy. Wedge in ductile iron vulcanized with AVK EPDM rubber. Fusion bonded epoxy coating acc. to GSK. Operated by hand wheel

Specifics:

DN65 - DN300

Pressure: 16 Bar

Temperature: 0 to +70°C



Flanged resilient seated pin indicator gate valve

Body and bonnet in ductile iron. Stem in stainless steel. Wedge in ductile iron vulcanized with AVK EPDM rubber. Fusion bonded epoxy coating acc. to GSK. Operated by hand wheel

Specifics:

DN50 - DN400

Pressure: 10 + 16 Bar

Temperature: 0 to +70°C



Flanged concentric butterfly valve

Body and bonnet in ductile iron. Stem in stainless steel. Wedge in ductile iron vulcanized with AVK EPDM rubber. Fusion bonded epoxy coating acc. to GSK. Operated by hand wheel

Specifics:

DN50 - DN300

Pressure: 10 + 16 Bar

Temperature: 0 to +70°C

Manufacturers list



ORBINOX

Orbinox with headquarters in Spain has 45 years of experience in designing, manufacturing knife gate valves, penstocks, dampers and valves for hydraulic works. The Products are often engineered to the customer's requirement both in dimensions and manufactured in different materials. Products are installed and used in more than 70 countries.

ORBINOX VALVES INTERNATIONAL

Parque Tecnologico de San Sebastian P. Mikeletegui, 56-planta 3 20009 DONOSTIA-SAN SEBASTIÁN - SPAIN

Tel.: +34 943 69 80 30 Fax: +34 943 30 92 83 www.orbinox.com ovi@orbinox.com



GLENFIELD

Glenfield is located in Scotland and has been designing and producing special valves for more than 150 years. Today the company mainly produces special valves for hydro power plants and for dams and reservoirs, which are installed all over the world.

GLENFIELD VALVES LIMITED

Glenfield Works, Queens Drive, Kilmarnock, Ayrshire United Kingdom, KA1 3XF

Tel: +44 (0)1563 521150 **www.glenfield.co.uk**



WOUTER WITZEL EUROVALVE

Wouter Witzel is located in the Nederlands, and designs and produces butterfly valves for complex and automated industrial processes. With the rubber lined valve type as basic model, a great variety of valves can be offered with different materials in valve bodies, dishes and seals. The international recognition has been gained from fifty years of manufacturing and product developments.

WOUTER WITZEL EUROVALVE, BV

De Pol 12 7581CZ Losser The Nederlands

Tel: +31 (0)53 536 95 36

www.wweurovalve.nl



WORLD VALVE

World Valve located in The Nederlands is specialized in designing and producing tailormade butterfly valve solutions, which fit to the customers requirements for manufacturing standards, features and quality.

World-Valve B.V.

PO Box 146 Leusinkweg 5a 7580 AC Losser 7582 CM Losser The Netherlands The Netherlands

Tel: +31 (0)53-5381295

www.worldvalve.com info@worldvalve.com



INTER APP

Inter App with headquarter in Switzerland has more than 40 years of experience with designing and manufacturing special valves of high quality with focus on high performance valves for selected industries.

INTERAPP SWITZERLAND

Grundstrasse 24 CH-6343 Rotkreuz

Tel: +41 (0) 41 798 22 33 Fax: +41 (0) 41 798 22 34 www.interapp.net

info@ch.interapp.net



TEC ARTEC

Tec artec with main location in Germany has more than twenty years of experience in engineering special valve products for high pressure and high temperature applications for industrial auxiliary equipment for power plants, gas and oil industry and the petro chemical industry. The products have gained a unique worldwide reputation for high quality and excellent performance.

TEC ARTEC GMBH

Am Heidering 7a Gewerbepark Nord D-16515 Oranienburg Germany

Tel: +49 3301 20 32-60 **www.tec-artec.com**



AVK

AVK Group is one of the leading valve manufacturing companies in the world, with focus on water handling. The Water division is focused on valves and accessories to water distribution, waste water handling and fire protection.

The Industrial division is focused on valves for water handling in industrial applications.

Together with the six specialized daughter companies within the AVK Group, a comprehensive product range is available for both high temperatures and high pressure applications.

The AVK group has almost 3000 people employed in 74 companies around the world, all dedicated to provide excellent local service to the customers. The Headquarter is located in Denmark.

AVK Group A/S

Søndergade 33 8464 Galten Denmark

Tel: +45 87542100

www.avkvalves.com

