

PRODUCT PRESENTATION

KNIFE GATE VALVES

BULK SOLIDS HANDLING VALVES

ABOUT JASH

Solid Product Group

- **Established in the year 1972**
- **Products :**
 - Water Control Gates
 - Mechanized Fine & Coarse bar screens
 - Water hammer control devices
 - Bulk material handling valves
 - Screw conveyors
 - Screw Generators and Pumps
 - Disc filters
- **Markets :**
 - India, Singapore, Malaysia, Hongkong,
 - Indonesia, Bahrain, Oman, Kuwait,
 - Jordan, Saudi Arabia, Turkey,
 - Italy, Norway, UK, Belgium, USA and
 - Many more.



MANUFACTURING UNITS

Solid Product Group



Unit 1, Indore with built up area spanning over 125,000 Sq. feet



Unit 2, Indore with built up area spanning over 155,000 Sq. feet



Unit 3 and 4, SEZ, Pithampur with built up area spanning over 100,000 Sq. feet

SOLID PRODUCT GROUP

Solid Product Group

- **Product categories :**
 - Knife gate valves
 - Bulk solid handling valves
- **Knife gate valves :**
 - Model: ZFI (Unidirectional)
 - Model: ZFI-BD (Bidirectional)
 - Model: MONO (Partial bidirectional)
- **Bulk solid handling valves :**
 - Model: ZFB
 - Model: KU (Swing gate)
 - Model: VEG (Fab. Slide gate)
 - Model: DFG (Double flap valve)
- **Applications :**
 - Water & waste water, Sea water
 - Power, Cement & Steel
 - Pulp & paper
 - Chemical & Petrochemical
 - Food processing
 - Pharmaceuticals
 - Biogas & Agriculture



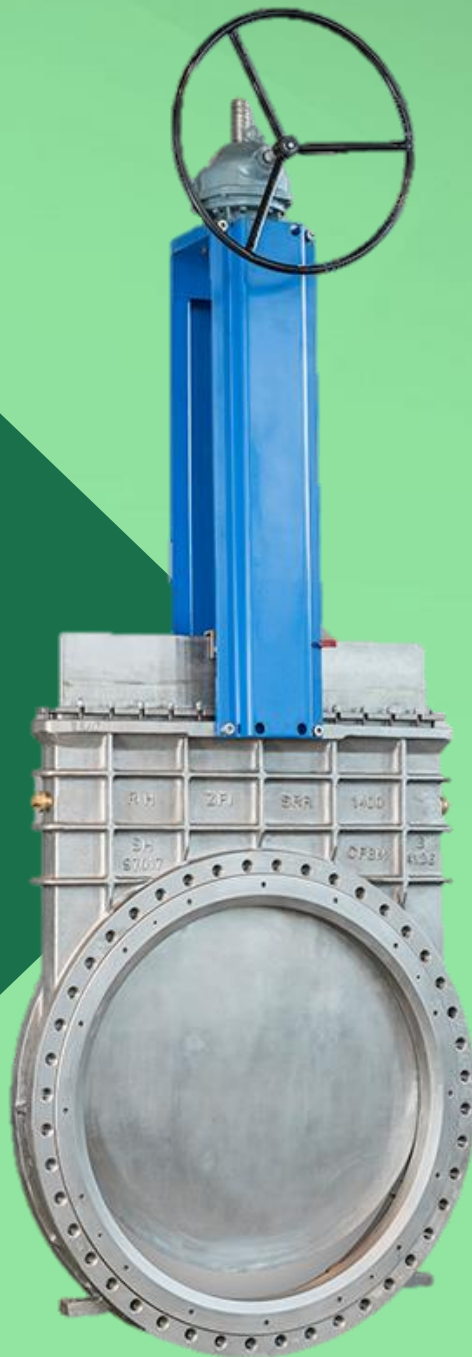
WHAT IS KNIFE GATE VALVE?

Solid Product Group

Knife Gate Valve is used to slice through sludge or sewerage and a gate is used for normal positive shut off. It is a gate valve design that is distinguished from the standard design by the use of a simple metal plate for the gate.

Knife gate valve can be unidirectional or bidirectional valve designed for general industrial service applications. Knife gate valves can be used for pressure tight isolation of solid-liquid mixes in water and waste water treatment plants and pumping stations, paper and pulp plants, power plants and mining industry.





MODEL: ZFI

MODEL: ZFI

Knife gate valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	SS / WCB
1	Resilient seated with replaceable metallic band.	C-201	C-211
2	Integral metal seated.	C-202	C-212
3	Resilient seated with replaceable metallic ring.	C-203	C-213
4	Metal seated with replaceable metallic ring.	C-204	C-214
5	Bidirectional.	C-205	C-215



MODEL: ZFI**PRODUCT DESCRIPTION****KNIFE GATE VALVE ■ MODEL: ZFI ■ SERIES: C-201, C-211**

Application	: These unidirectional valves are most suitable for pressure tight shut-off for water, sea water, mild slurry, liquid-solid mixes and dry bulk solid applications.
Available sizes	: DN 50 (2") to DN 1200 (48")
Pressure rating	: PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material, primarily for liquid applications
Temperature suitability	: -20°C to 250°C
Seating	: Resilient seat with metallic band
Bonnet	: Bolt on type (Optional)
Flange drilling standard	: ASME B16.5 / ASME B16.47 #150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	: Manual, chain wheel, pneumatic, electric actuator and Hydraulic



MODEL: ZFI

Knife gate valves

PRODUCT DESCRIPTION**KNIFE GATE VALVE ■ MODEL: ZFI ■ SERIES: C-202, C-212**

Application	: These unidirectional valves are most suitable for material tight shut-off for mild slurry, liquid-solid mixes and dry bulk solid applications.
Available sizes	: DN 50 (2") to DN 1200 (48")
Pressure rating	: PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material, primarily for liquid applications
Temperature suitability	: -20°C to 1100°C
Seating	: Integral metal seated
Bonnet	: Bolt on type (Optional)
Flange drilling standard	: ASME B16.5 / ASME B16.47 #150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	: Manual, chain wheel, pneumatic, electric actuator & Hydraulic



MODEL: ZFI**PRODUCT DESCRIPTION****KNIFE GATE VALVE ■ MODEL: ZFI ■ SERIES: C-203, C-213**

Application	: These unidirectional valves are most suitable for pressure tight shut-off for water, sea water, mild slurry and liquid-solid mixes
Available sizes	: DN 1400 (56") to DN 2400 (96"), higher sizes on request
Pressure rating	: PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material
Temperature suitability	: -20°C to 250°C
Seating	: Resilient seat with replaceable metal ring
Bonnet	: Bolt on type (Optional)
Flange drilling standard	: ASME B16.5 / ASME B16.47 #150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	: Manual / chain wheel through gear, electric actuator & Hydraulic



MODEL: ZFI

Knife gate valves

PRODUCT DESCRIPTION**KNIFE GATE VALVE ■ MODEL: ZFI ■ SERIES: C-204, C-214**

Application	:	These unidirectional valves are most suitable for material tight shut-off for mild slurry, liquid-solid mixes and for dry abrasive media.
Available sizes	:	DN 1400 (56") to DN 2400 (96"), higher sizes on request
Pressure rating	:	PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material, primarily for liquid applications
Temperature suitability	:	-20°C to 950°C
Seating	:	Metal seat with replaceable metal ring
Bonnet	:	Bolt on type (Optional)
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	:	Manual/chain wheel through gear, electric actuator and Hydraulic

MODEL: ZFI-BD

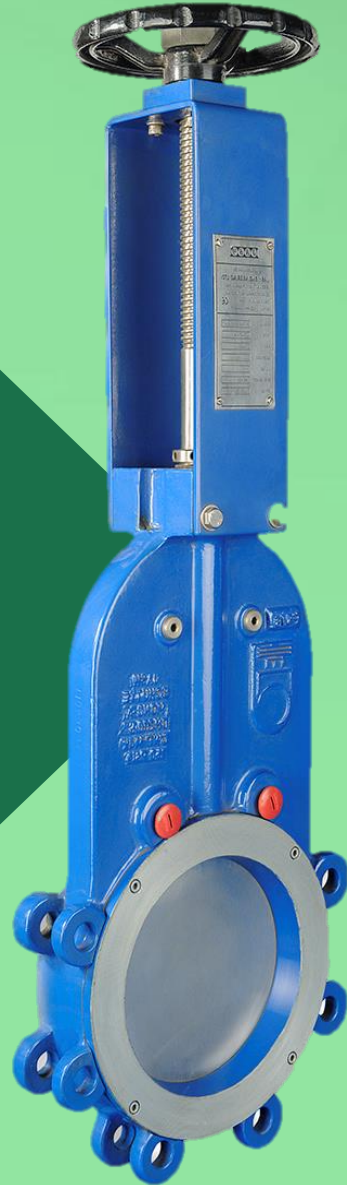
Knife gate valves

PRODUCT DESCRIPTION

KNIFE GATE VALVE ■ MODEL: ZFI ■ SERIES: C-205, C-215



Application	:	These bidirectional valves are most suitable for pressure tight shut-off for water, sea water, mild slurry and liquid-solid mixes.
Available sizes	:	DN 50 (2") to DN 2400 (96"), higher sizes on request
Pressure rating	:	PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material
Temperature suitability	:	-20°C to 250°C
Seating	:	Resilient seat with replaceable metal ring
Bonnet	:	Bolt on type (Optional)
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	:	Manual, chain wheel, pneumatic, electric actuator and Hydraulic



MODEL: MONO

MODEL: MONO

Knife gate valves

SERIES Nomenclature :

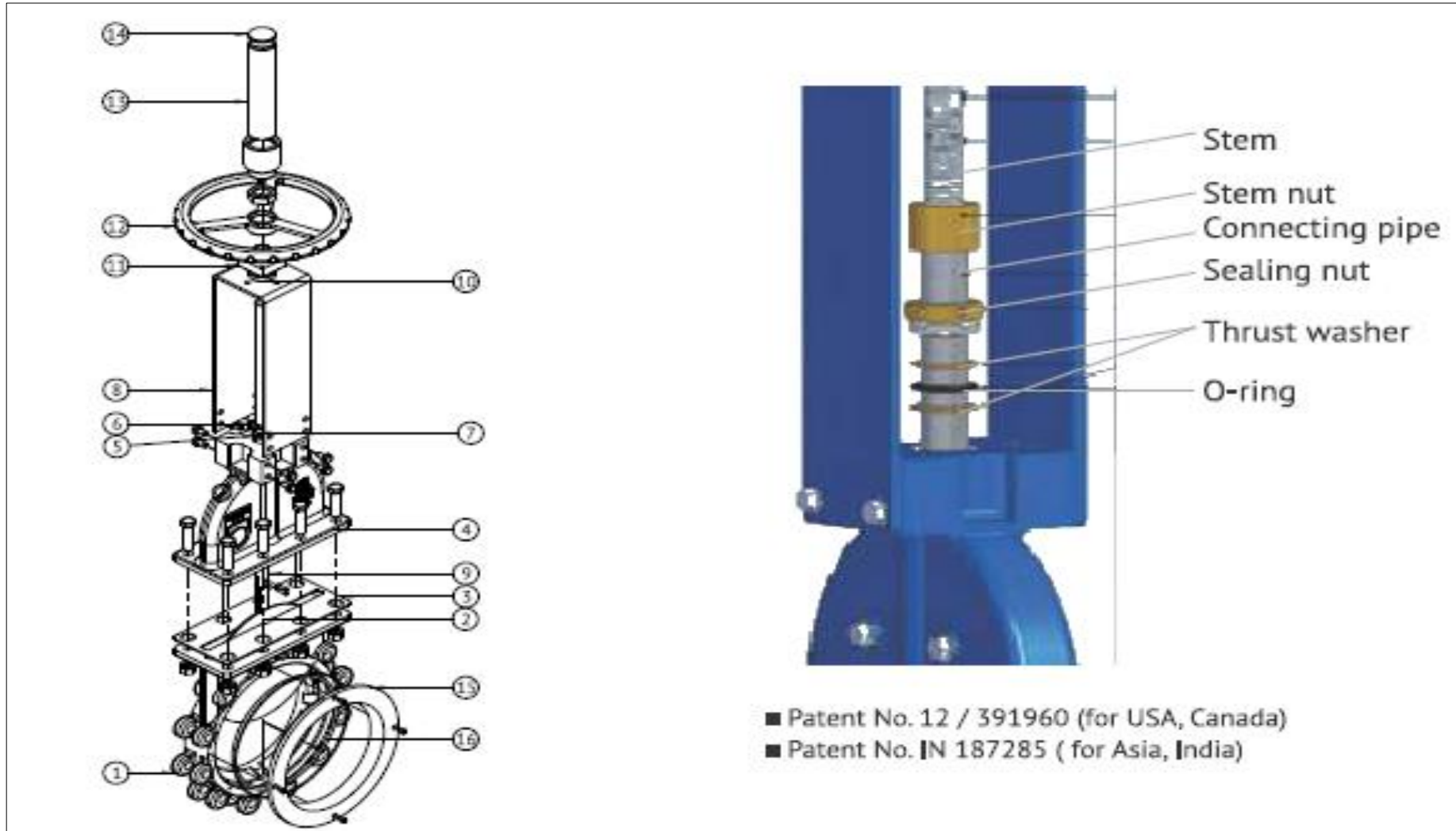
Sr. No.	Valve Type	CI / DI	SS
1	Resilient seated with replaceable metallic ring.	C-102	C-112



MODEL: MONO

Knife gate valves

Parts Nomenclature :



MODEL: MONO

Knife gate valves

Parts Nomenclature : Series C-102, C-112

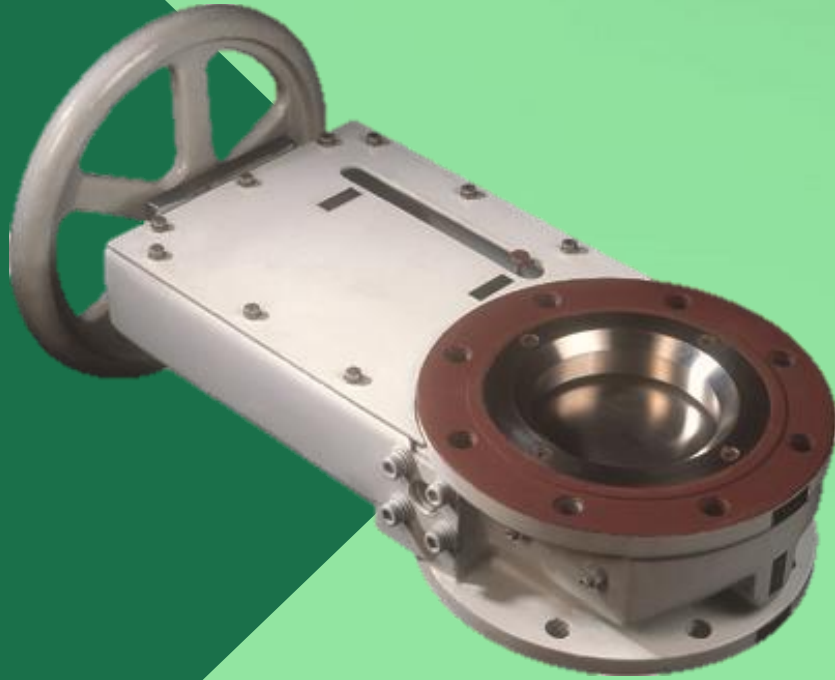
Part No.	Description	Material of construction
1	Housing	Cast iron IS 210 Gr.FG 260/ Cast ductile iron ASTM A 536 Gr.65-45-12/ Cast stainless steel ASTM A 351 Gr.CF: 8 / CF: 8M / CF: 3M / CK: 20 / Super duplex
2	Gate	Stainless steel ASTM A 240 Gr. 304 / 316
3	Bonnet Gasket	EPDM
4	Bonnet	Cast ductile iron ASTM A 536 Gr.65-45-12 / Cast stainless steel ASTM A 351 Gr.CF: 8 / CF: 8M / CF3M / CK: 20 / Super duplex
5	Spacer	Stainless steel ASTM A 240 Gr. 304 / 316 / 310
6	Gland O Ring	EPDM
7	Sealing Nut (Gland)	Stainless steel ASTM A 240 Gr. 304 / 316 / 310
8	Yoke	Carbon steel (IS:2062 Gr.E250) / Stainless steel ASTM A 240 Gr. 304 / 316
9	Stem	Stainless steel ASTM A 276 Gr. 304 / 316
10	Stem Nut	Brass
11	Adapter Plate	Carbon Steel (IS:2062 Gr.E250) / Stainless steel ASTM A 240 Gr. 304 / 316
12	Hand wheel	Cast ductile iron ASTM A 536 Gr.65-45-12 / Carbon Steel (IS:2062 Gr.E250)
13	Stem protector	Carbon Steel / Polycarbonate
14	Cap	PVC
15	Seat: (a) Resilient seat retained by replaceable metallic seat retainer ring (b) Non integral metal seat	Cast ductile iron ASTM A 536 Gr.65-45-12 / Cast stainless steel ASTM A 351 Gr.CF: 8 / CF: 8 M / CF: 3M / CK: 20 / Super duplex / Cast carbon steel ASTM A 216 Gr.WCB Cast ductile iron ASTM A 536 Gr.65-45-12 / Cast stainless steel ASTM A 351 Gr.CF: 8 / CF: 8 M / CF: 3M / CK: 20 / Super duplex / Cast carbon steel ASTM A 216 Gr.WCB
16	Seal	NBR / EPDM / Viton / White Neoprene

MODEL: MONO

Knife gate valves

PRODUCT DESCRIPTION**KNIFE GATE VALVE ■ MODEL: MONO ■ SERIES: C-102 & C-112**

Application	:	These are bonneted unidirectional valves suitable for pressure tight shut-off for water, sea water and liquid-solid mixes. These are partially bidirectional and are glandless thereby offering low operating torque as compared to conventional knife gate valves.
Available sizes	:	DN 50 (2") to DN 1200 (48")
Pressure rating	:	PN3 (45 PSI), PN6 (90 PSI) and PN10 (150 PSI) depending upon housing material
Temperature suitability	:	-20°C to 250°C
Seating	:	Resilient seat with replaceable metal ring
Bonnet	:	Provided
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10 / PN 16
Modes of operation	:	Manual, chain wheel, pneumatic, electric actuator & Hydraulic



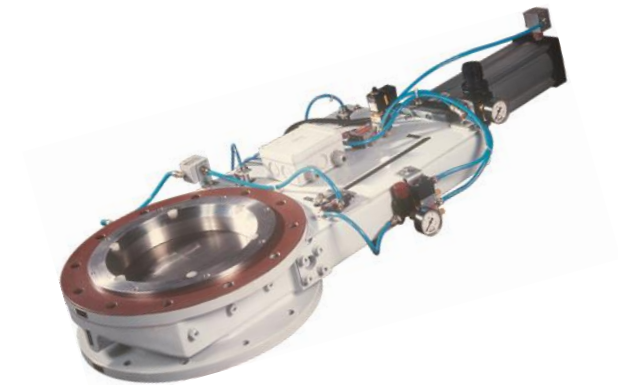
MODEL: ZFB

MODEL: ZFB

Slide gate valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	WCB / SS
1	Resilient seated with replaceable metallic ring.	C-601	C-611
2	Inflatable seal with replaceable metal ring.	C-602	C-612



MODEL: ZFB

Slide gate valves

PRODUCT DESCRIPTION**SLIDE GATE VALVE ■ MODEL: ZFB ■ SERIES: C-601, C-611**

Application	:	These unidirectional valves are suitable for pressure tight shut-off upto 3 Bar (45 PSI) for powder and granular materials. Its unique design ensures minimal material retention in valve, ability to achieve shut-off in standing columns and are leak tight to environment.
Available sizes	:	DN 100 (4") to DN 600 (24")
Pressure rating	:	PN3 (45 PSI)
Temperature suitability	:	-20°C to 250°C
Seating	:	Resilient seat with replaceable metal ring
Dust enclosure	:	Provided
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10
Modes of operation	:	Manual, chain wheel, pneumatic, electric actuator & Hydraulic



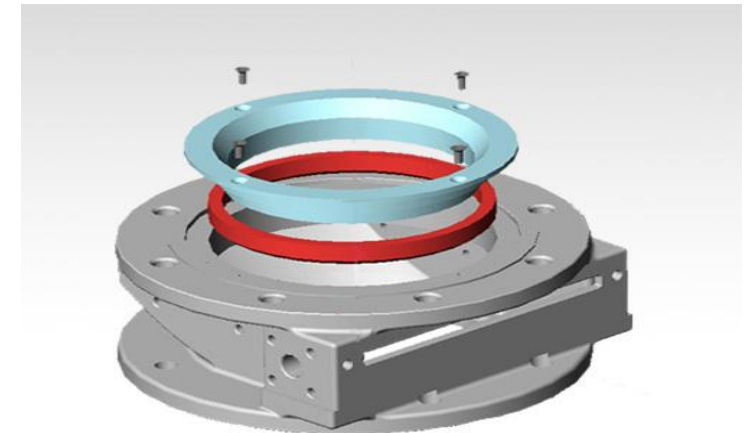
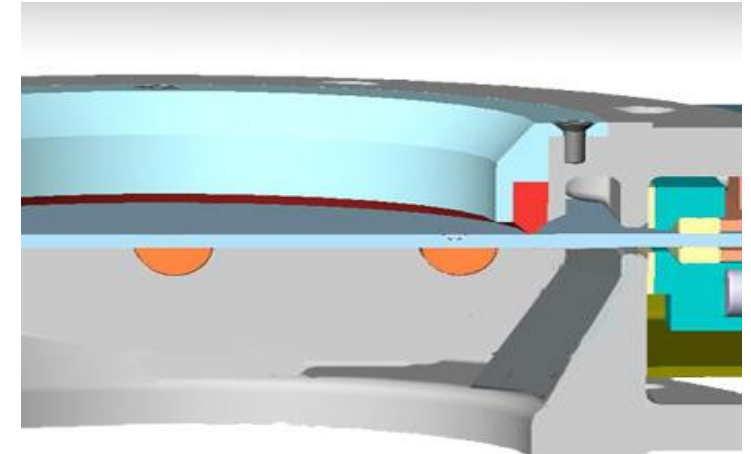
MODEL: ZFB

Slide gate valves

PRODUCT DESCRIPTION**Seat sealing arrangement: Series C-601, C-611 -**

Soft seated design for low pressure application.

- Wiper type rubber peripheral face seal to scrape powdery material from gate during opening.
- Seal designed for easy replacement at site with minimum efforts and skills.
- Seal retainer ring to guide the material flow towards the valve center and to reduce the seal wear by preventing exposure to material flow.

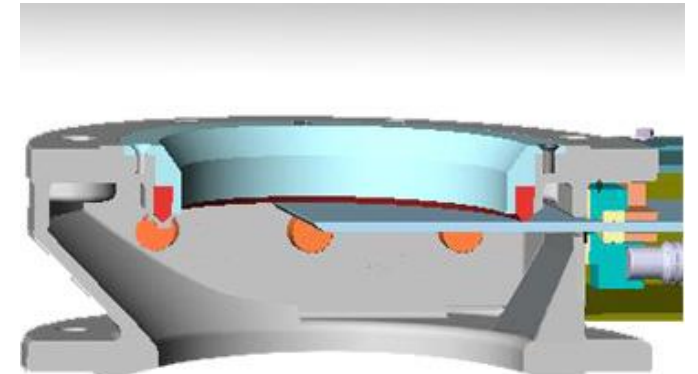
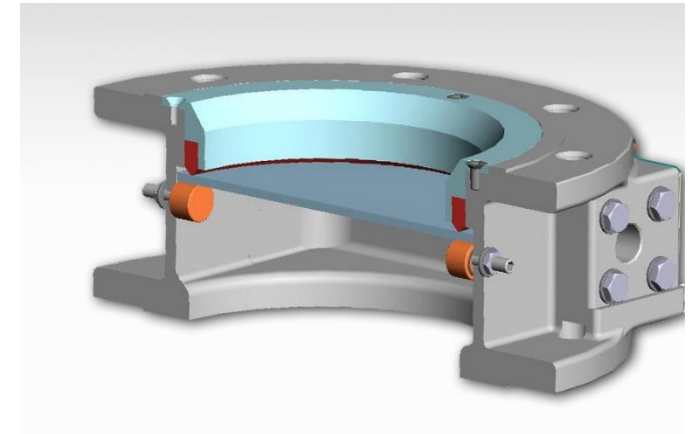


MODEL: ZFB

Slide gate valves

PRODUCT DESCRIPTION**Guide arrangement: Series C-601, C-611 -**

- Externally adjustable gate guides to support the gate in closed condition of the valve and control the leakage across the gate.
- Large internal space around and above the seal face enables full closure of gate by displacement of densely packed standing column of material.

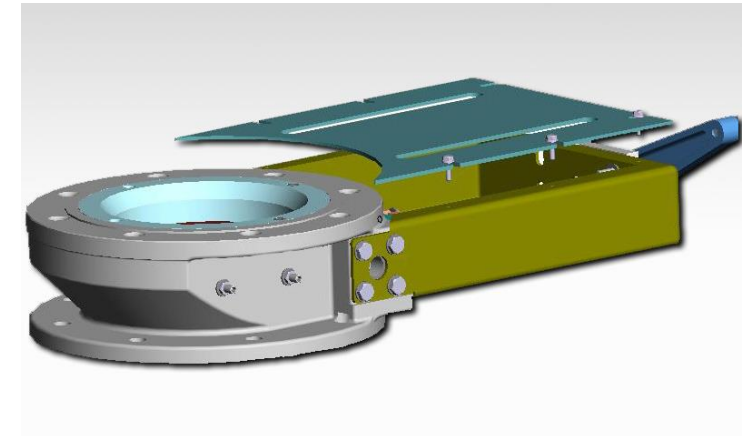
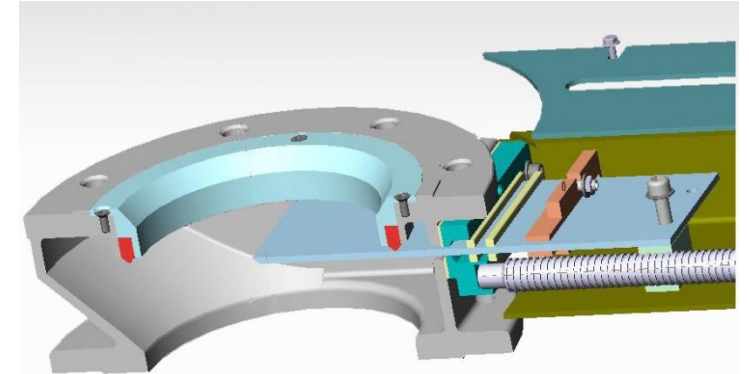


MODEL: ZFB**PRODUCT DESCRIPTION**

Slide gate valves

Cross seal and encapsulation box: Series C-601, C-611 -

- Cross seal housed in cartridge with a pusher. This enables to adjust the tightness of gland packing onto the gate after a prolonged use.
- Encapsulation box to prevent the powdery material leaking through the cross seal from falling out of the valve and spoil the plant environment.



MODEL: ZFB

Slide gate valves

PRODUCT DESCRIPTION**SLIDE GATE VALVE ■ MODEL: ZFB ■ SERIES: C-602, C-612**

Application	:	These unidirectional valves are suitable for pressure tight shut-off upto 5 Bar (70 PSI) for powder and granular materials from flow side only. Its unique design ensures minimal material retention in valve, ability to achieve shut-off in standing columns and leak tight to environment.
Available sizes	:	DN 100 (4") to DN 600 (24")
Pressure rating	:	PN5 (70 PSI)
Temperature suitability	:	-20°C to 250°C
Seating	:	Inflatable seal with replaceable metal ring
Dust enclosure	:	Provided
Flange drilling standard	:	ASME B16.5/ASME B16.47#150 / BS-EN 1092 PN 10
Modes of operation	:	Pneumatic





MODEL: KU-STD

MODEL: KU-STD

Swing gate valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	WCB / SS
1	Resilient seated with viper seal.	C-301	C-311



MODEL: KU-STD

Swing gate valves

PRODUCT DESCRIPTION**SWING GATE VALVE ■ MODEL: KU-STD ■ SERIES: C-301, C-311**

Application	:	These unidirectional valves are suitable for pressure tight shut off upto 3 Bar (45 PSI) for powders and granular materials. Its unique design offers fast shut-off (less than 3 Secs, even manually) and allow shut-off in standing columns and are leak tight to environment.
Available sizes	:	DN 100 (4") – DN 400 (16")
Pressure rating	:	PN3 (45 PSI)
Temperature suitability	:	-20°C to 250°C
Seating	:	Resilient seated with viper seal
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10
Modes of operation	:	Manual, pneumatic

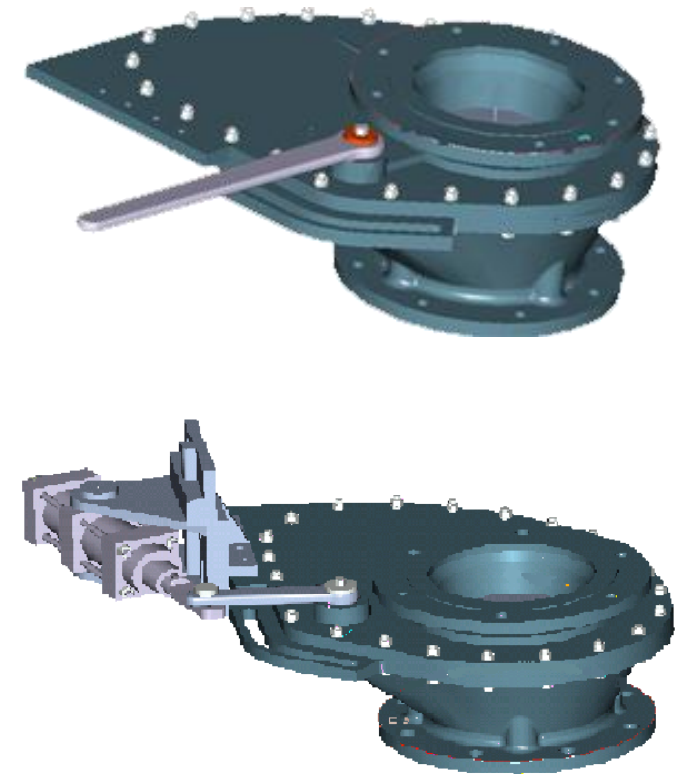


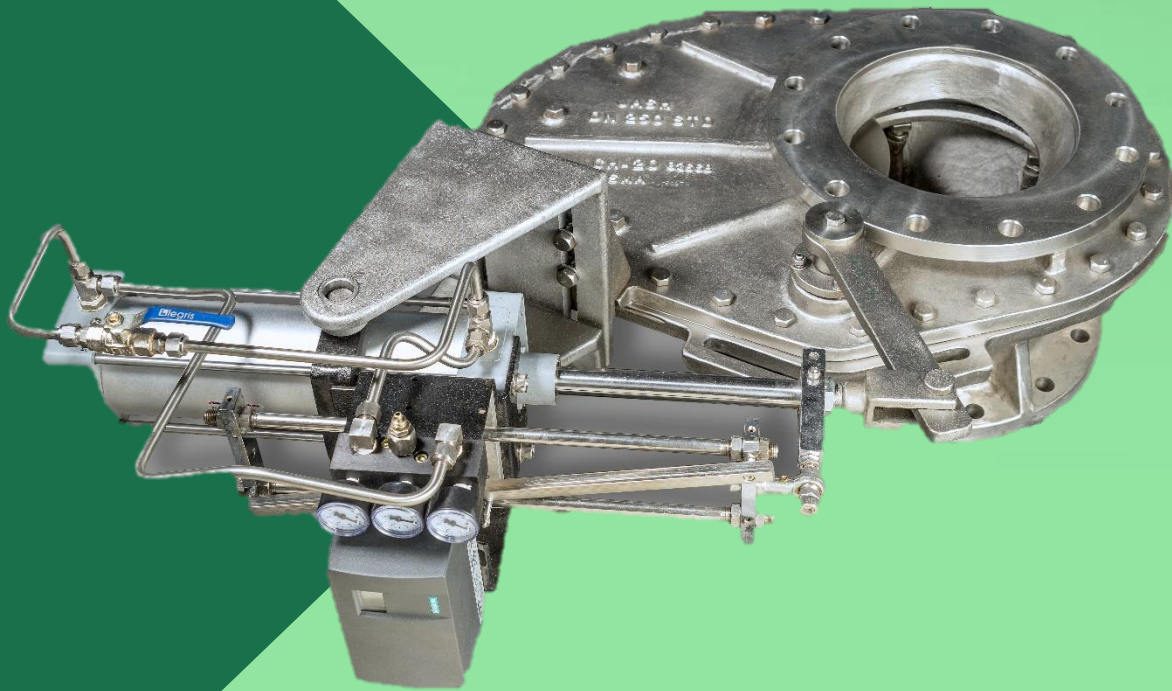
MODEL: KU-STD

Swing gate valves

PRODUCT DESCRIPTION

- Unidirectional valve with peripheral face sealing.
- Soft seated wiper type sealing system.
- Swinging operation of gate, Opening / closing < 3 seconds.
- Zero seat leakage at 1 bar.
- No leakage to environment.
- Encapsulated gate operation, no glands required.
- Size range : DN 100–DN 400.
- Housing material options : CI / WCB / SS
- Operation : Manual / Pneumatic / Motorized
- For quick & reliable shutoff requirements.
- For coarse metering of bulk solids.
- For high cycle operations.
- For environmentally safe handling of hazardous materials.





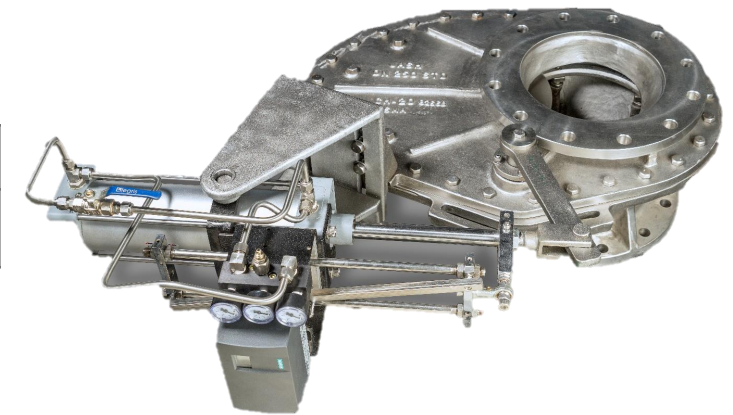
MODEL: KU-HT

MODEL: KU-STD

Swing gate valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	SS
1	Integral / replaceable metal seat.	-	C-312

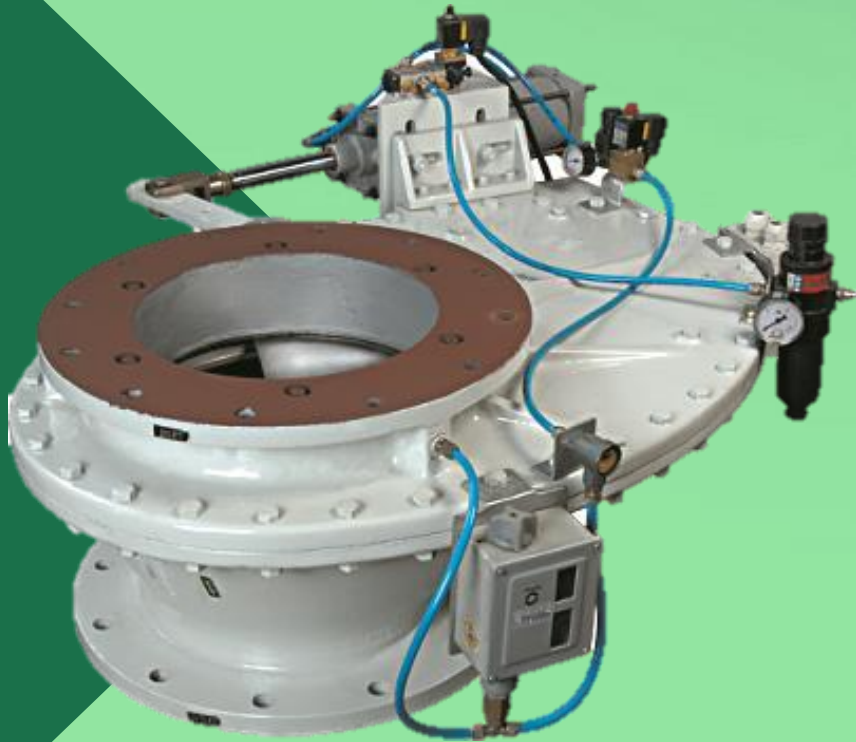


MODEL: KU-HT

Swing gate valves

PRODUCT DESCRIPTION**SWING GATE VALVE ■ MODEL: KU-HT ■ SERIES: C-312**

Application	:	These are high temperature unidirectional valves suitable for bed ash drain application in coal fired boilers. These valves are made up of special grade stainless steel to suit higher temperature. Its unique design offers fast shut-off (less than 1 sec.) and allow shut-off in standing columns and are leak tight to environment.
Available sizes	:	DN 100 (4") – DN 400 (16")
Pressure rating	:	PN3 (45 PSI)
Temperature suitability	:	800°C to 1100°C
Seating	:	Integral / replaceable metal seat
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10
Modes of operation	:	Manual, pneumatic



MODEL: KU-PAM

MODEL: KU-PAM

Swing gate valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	WCB / SS
1	Integral / replaceable metal seat.	C-303	C-313



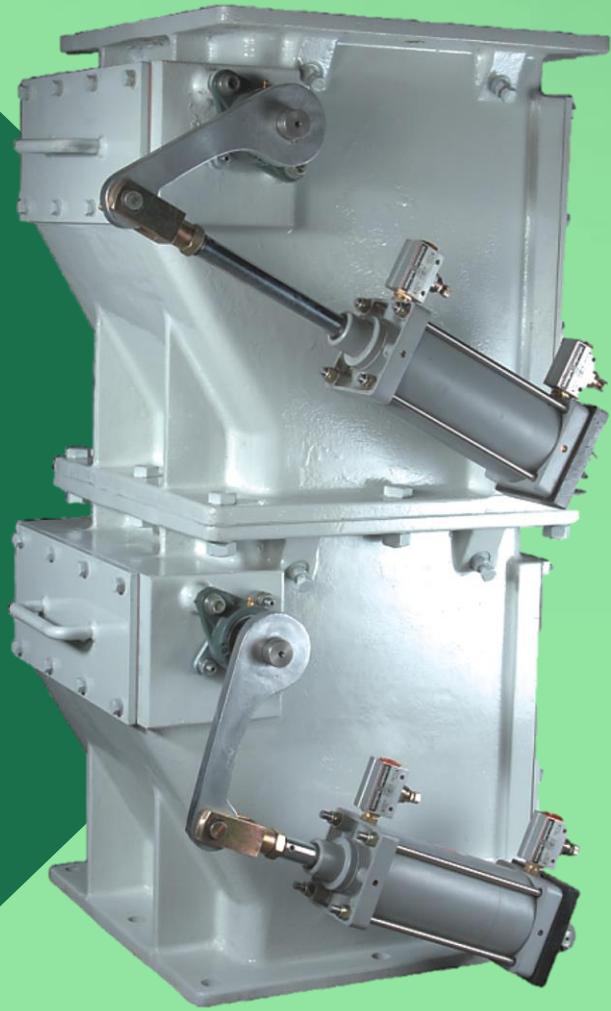
MODEL: KU-PAM

Swing gate valves

PRODUCT DESCRIPTION**SWING GATE VALVE ■ MODEL: KU-HP+PAM ■ SERIES: C-303, C-313**

Application	:	These bidirectional valves are designed for pressure and vacuum tight shut-off upto 5 Bar (70 PSI) in pneumatic conveying of bulk solid materials. These valves are leak tight to environment and are ideal as main inlet valve of pressure vessel in dense phase conveying and can also be used as replacement of dome valves.
Available sizes	:	DN 100 (4") – DN 400 (16")
Pressure rating	:	PN5 (70 PSI)
Temperature suitability	:	-20°C to 250°C
Seating	:	Resilient seated with inflatable seal. Replaceable metal ring (Optional)
Flange drilling standard	:	ASME B16.5 / ASME B16.47#150 / BS-EN 1092 PN 10
Modes of operation	:	Pneumatic

JASH Schütte



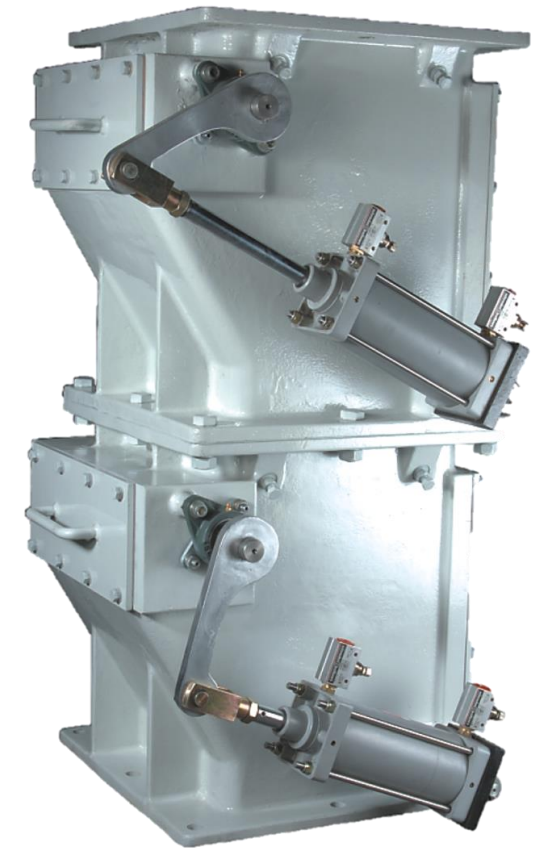
MODEL: DFG

MODEL: DFG

Double flap valves

SERIES Nomenclature :

Sr. No.	Valve Type	CI / DI	WCB / SS
1	Metal seat with replaceable cone and flapper.	C-401	
2	Metal seat with replaceable cone and flapper.	C-402	



MODEL: DFG

Double flap valves

PRODUCT DESCRIPTION**DOUBLE FLAP VALVE ■ MODEL: DFG ■ SERIES: C-401**

Application	:	These valves are ideal for air lock, batching or metering applications in free-flowing and abrasive bulk materials. These are especially designed to prevent bridging of material in the valve and enable in-situ replacement of seat and flapper. These valves are offered in short height for space tight installations.
Available sizes	:	Sq.200 (8") – Sq.400 (16")
Flow rate	:	1.0 – 4.5 m ³ /hr.
Pressure rating	:	PN3 (45 PSI)
Temperature suitability	:	-20°C to 800°C
Seating	:	Metal seated with replaceable cone and flapper
Flange drilling standard	:	As per Jash-Schütte
Modes of operation	:	Counter weight, pneumatic, geared motor



MODEL: DFG

Double flap valves

PRODUCT DESCRIPTION**DOUBLE FLAP VALVE ■ MODEL: DFG ■ SERIES: C-402**

Application	:	These valves are ideal for air lock, batching or metering applications in free-flowing and abrasive bulk materials. These are especially designed to prevent bridging of material in the valve and enable in-situ replacement of seat and flapper. These are provided with increased height to handle higher flow rate.
Available sizes	:	Sq. 200 (8") – Sq. 300 (12")
Flow rate	:	2.50 – 8.0 m ³ /hr.
Pressure rating	:	PN3 (45 PSI)
Temperature suitability	:	-20°C to 800°C
Seating	:	Metal seated with replaceable cone and flapper
Flange drilling standard	:	As per Jash Schütte
Modes of operation	:	Counter weight, pneumatic, geared motor

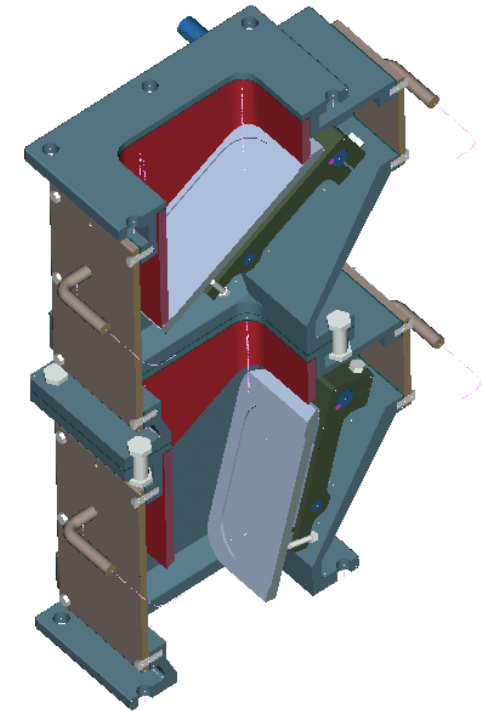
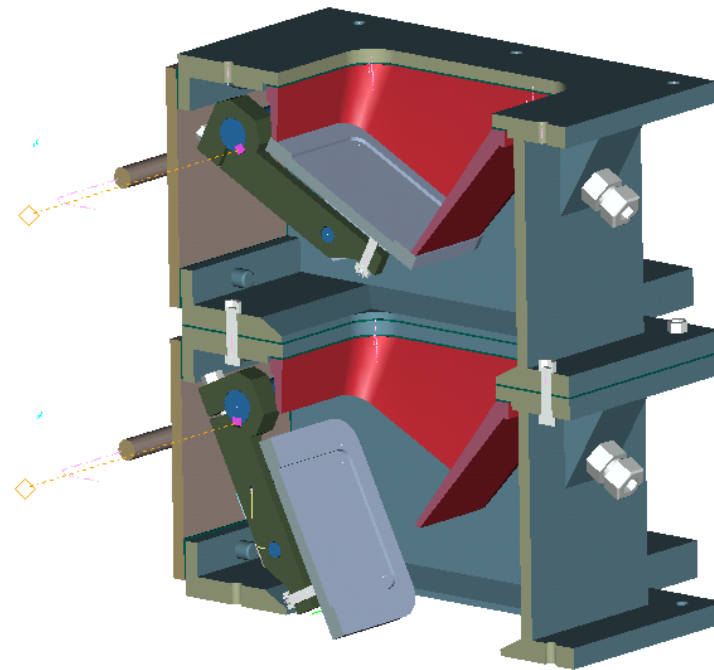


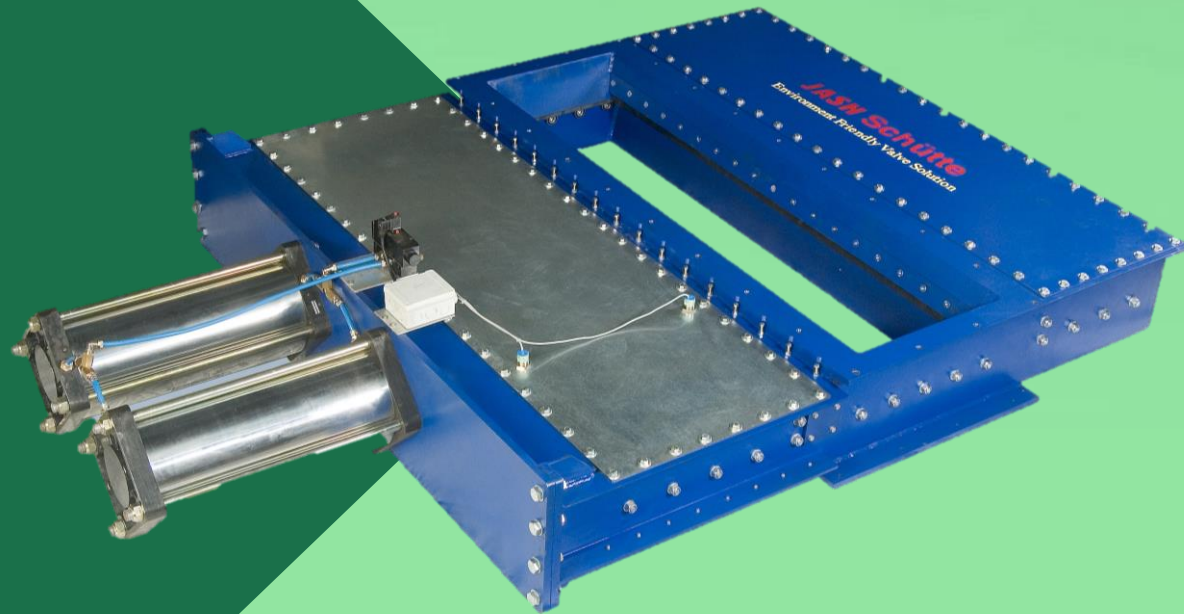
MODEL: DFG

Double flap valves

PRODUCT DESCRIPTION

- Seat and flapper made of EN8 hardened material to withstand abrasion and ensure long life.
- Mating faces of seat and flappers lapped to a high accuracy for improved leak tight performance.
- Replaceable type seat and flapper to prevent replacement of full housing due to wear.





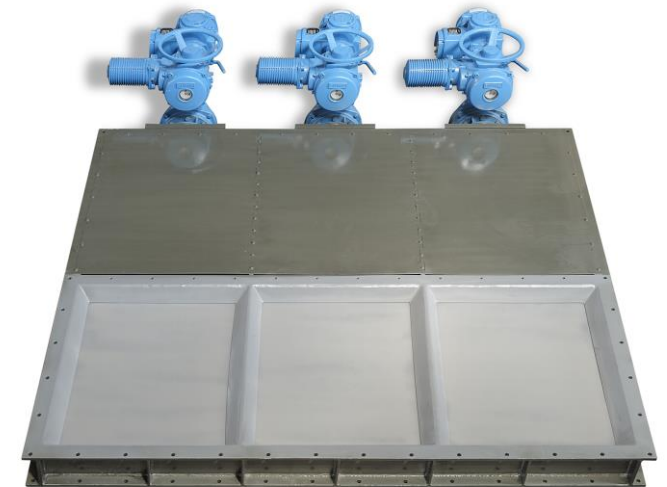
MODEL: VEG

MODEL: VEG

Slide gate valve

SERIES Nomenclature :

Sr. No.	Valve Type	MS	SS
1	Integral metal seat / resilient seat, inflatable seat as optional.	C-531	C-541



MODEL: VEG

Slide gate valve

PRODUCT DESCRIPTION

FABRICATED SLIDE GATE VALVE ■ MODEL: VEG ■ SERIES: C-531, C-541



Application	:	The VEG series valves are fabricated valves and are custom built to suit the size & application requirement of customer.
Available sizes	:	From Sq. 100 (4") – Sq. 4000 (160") mm or as required by customer.
Temperature suitability	:	-20°C to 950°C
Seating	:	Integral metal seat, resilient seat and inflatable seat is offered as optional
Flange drilling	:	As per Jash-Schütte
Modes of operation	:	Manual, chain wheel, pneumatic, geared motor, electric actuator and hydraulic

Creating a sustainable environment Worldwide !

Thank You



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