

GLOBAL PRESENCE



JAY AMBE ENGINEERING CO.
MANUFACTURER OF INDUSTRIAL CHEMICAL PROCESS PUMPS & VALVES

Ahmedabad Office & Works :
1, Shree Jay Laxmi Industrial Estate, C.M.C. Compound,
G.I.D.C., Odhav, Ahmedabad - 382 415. INDIA.
Tele No. : +91 - 79 - 22894562, 22874508
sales@jecwoodland.com

Mumbai Office :
7, Juhu Gulmohar, Gulmohar Main Road,
Juhu, Mumbai - 400 049. INDIA.
Telefax : +97 - 9987188208
jaldhij@jecwoodland.com

USA Branch :
Mr. Jon Duran
2146 Pinto Avenue, Pocatello Idaho, 83201 USA
Cell : (208) 390 - 7943 Fax : (208) 237 - 2078
jon.duran@djsalesllc.com

www.jecwoodland.com / www.woodlandengineers.com / www.jecpumps.in / www.propellerpump.in

An ISO 9001 Certified Company



- Chemical • Petrochemical
- Nuclear Power Plants • Refinery • Fertilizer
- Paper • Food & Beverages • Evaporation & Effluent Treatment Plants • Slurries

About Us

JAY AMBE ENGINEERING COMPANY (JEC) is established in 1996 with the manufacturing of centrifugal pumps of different sizes & capacities. At the helm of the organization is a young & dynamic technocrat Mr. Rajesh Patel who is having practical experience in the field of fluid handling and knack in metallurgy, design & understanding application to offer most suitable, reliable, reasonable quality product within shortest delivery frame.

In a short span of time, company made an extraordinary growth under the wonderful guidance & leadership of Mr. Rajesh Patel and his brother Mr. Jaldhij Patel by extending the product range in centrifugal pumps and added manufacturing of pinch valves and wide range of other industrial valves. Today, JAY AMBE ENGINEERING Co. is India's one of the leading centrifugal pumps & valves manufacturing company.

JEC Pumps are specialized to handle all forms of fluids transfer be it clear, corrosive liquids or slurry pumping. We believe in accepting challenges and offer tailor made solutions to fulfill customer requirements.

JEC is an ISO 9001:2008 certified company and has successfully implemented the quality management system at each & every level of the organization through close supervision & stringent Quality Checks. JEC is equipped with all latest technology & machineries to produce world class quality products having utmost precision at every level.

JEC believes in continual improvement in products & systems to cater to emerging requirements of the customers and to enhance the customer satisfaction. R&D team of JEC pump is comprised of highly qualified & experienced technocrats working under the guidance of Mr. S. L. Abyanbkar (Technical Advisor of Indian Pump Manufacturing Association) a well renowned name in the pump industry that innovates world class products / solutions and satisfy critical requirements of the customers.

Highly Vigilant & resourceful management team supported by committed & dedicated employees have made the JAY AMBE ENGINEERING COMPANY a renowned name in the India as well as in the few of the foreign countries.

Our Mission

To extend the product range as per the international standard with fully mechanized and state of the art technology to penetrate the National & International market.



Our Vision

To establish strong marketing channels to reach each & every part of the world.



Our Values

- Quality Product
- Team Work
- Accountability
- Shortest Delivery Time
- Competitive Price
- Integrity



AF

Axial Flow Pump Propeller Pump

APPLICATION

The JEC Axial Flow pump is unmatched in the industry for high volume / Low head pumping requirements, especially when corrosive and/or abrasive solutions are involved. Mainly used in the following application:

- Evaporator and Crystallizer Circulation
- Phosphate, Soda Ash, Potash and Sodium Chloride Processing
- Polypropylene Reactors, Xylene application
- Black Liquor Evaporator, Chlorine Dioxide Generators
- Sewage Digesters
- Raw Water pumping, Flood control, Marine Ballast transfer

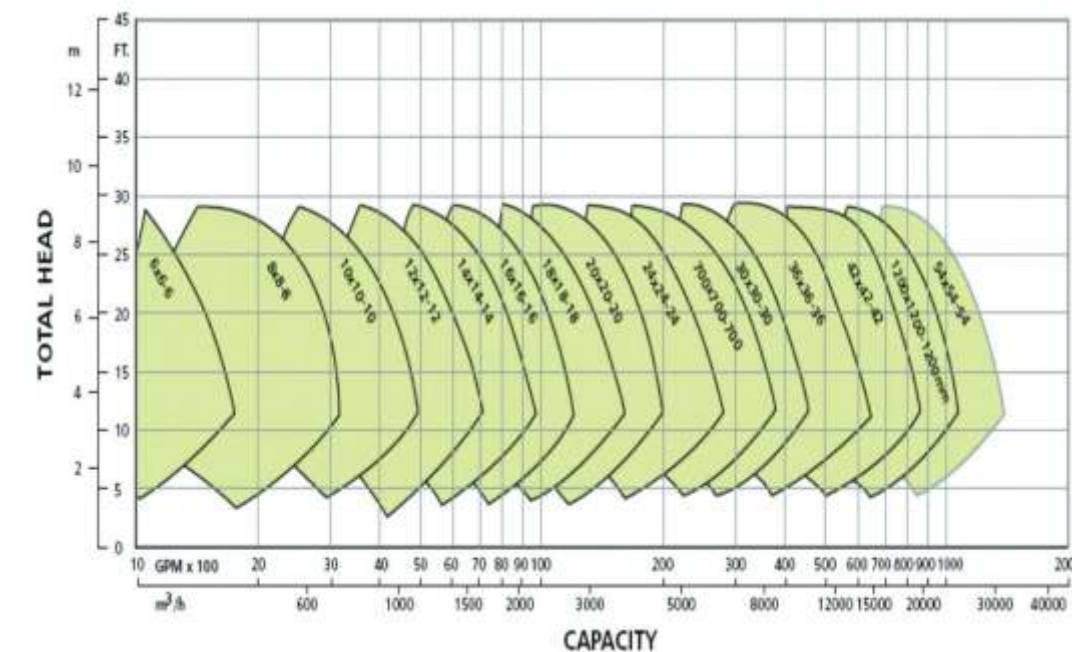
DESIGN

The Axial Flow pump generates flow by the thrust or lift action of rotating axial vanes of the impeller. The pump has an elbow that directs the flow through the suction and out the discharge end of the pump. It can be used in the top or end suction configuration depending up on the need and Flange dimensions, bolt circle and holes comply with ANSI B16.5, 150#. The back pull out design (up to 14" size) allows for easy maintenance and repair as the rotating element may be removed without disturbing the pipe work. Pump has wear rings as standard and lifting eye on bearing bracket.

OPERATING DATA

Pump size	5 inch to 36 inch (DN 125 to 900)
Flow up to	20,000 m ³ / hr
Head up to	9 meter
Temperature up to	300° C
Max. working Pressure	10 Bar

FAMILY CURVE





ANSI

Centrifugal Chemical Process Pump Match III

APPLICATIONS

Acid Transfer, Beverage Processing, Brine, Chemical Processing, Chloral-alkali, Corrosive Services, Organic Chemicals, Polymers, Sea Water, Solvents, Paper, Food, Synthetic Fibers, Slurry & others.

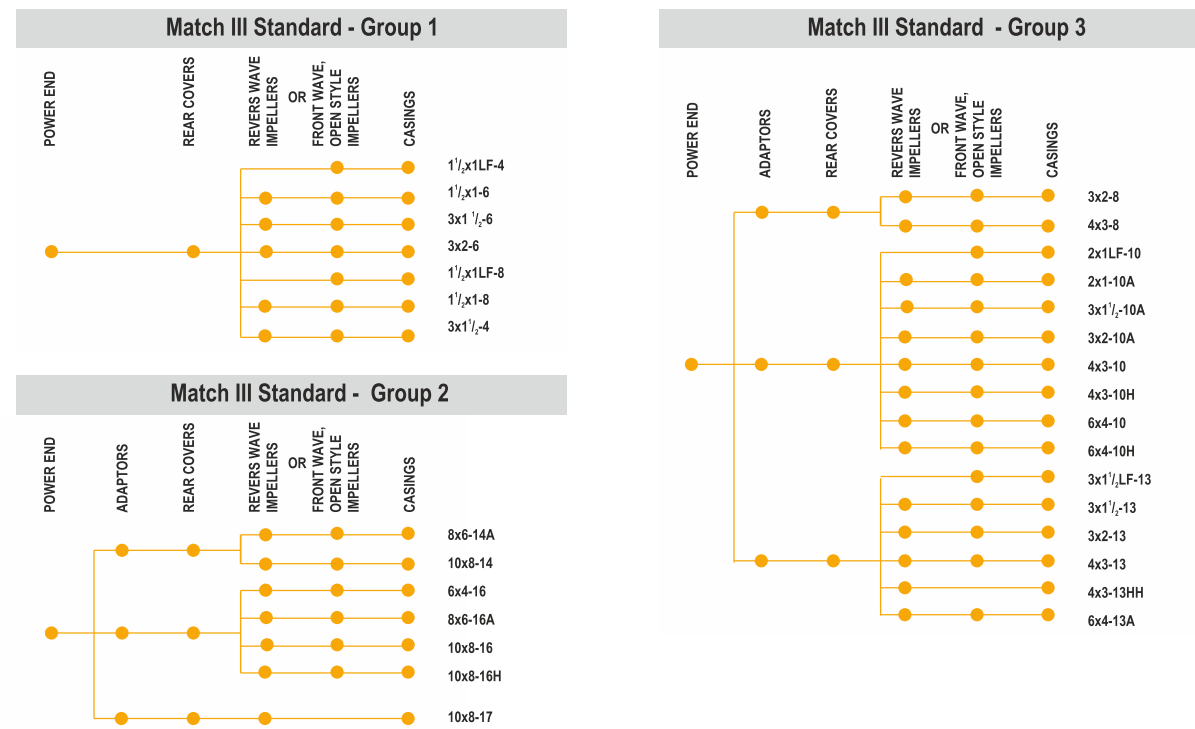
RANGE

- **Delivery Size** : up to 200 mm (8" Inch)
- **Capacity** : up to 410 M³/Hr.
- **Head** : up to 150 Meter Working Pressure 17 kg/Cm²

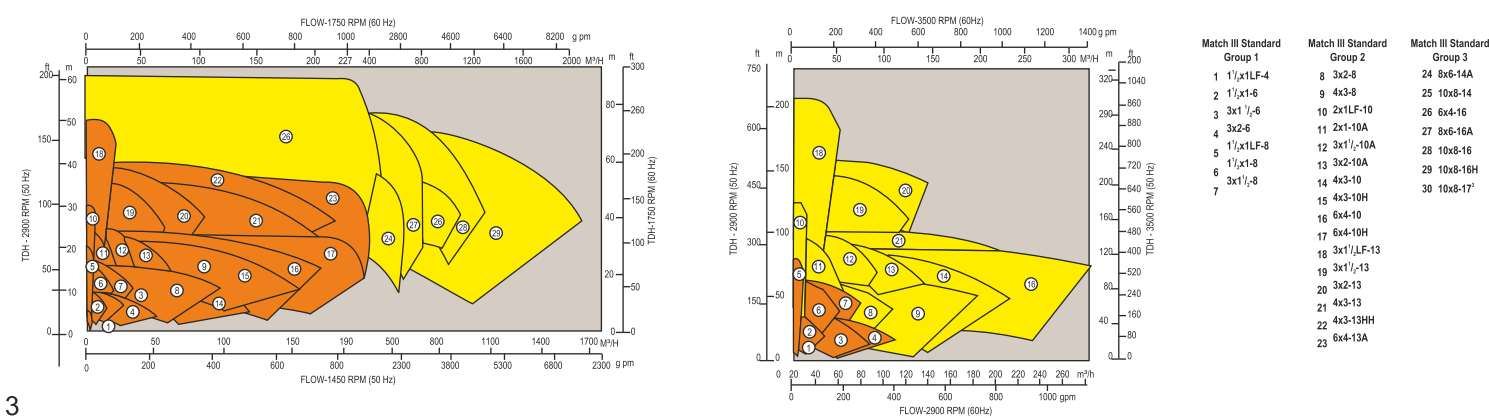
CONSTRUCTIONAL FEATURES

Pumps are as per ANSI B73-1M The design is of back pull out type. Large varieties of models are available to operate at 1450 RPM and 2900 RPM at 50 HZ & 1750 RPM and 3500 RPM at 60 HZ. Ansi series chemical process pump is a horizontal single stage centrifugal pump.

MODULAR INTERCHANGEBILITY



HYDRAULIC COVERAGE



PCF

Centrifugal Chemical Process Pump ISO 2858



APPLICATION

The PCF centrifugal pump is suitable for handling water, Condensate, oil some aggressive chemical products and other liquids mainly used in the following application:

- Water supply
- Irrigation
- Air conditioning
- Fire fighting
- Drainage
- Heating
- Chemical and petrochemical
- Sugar and alcohol industry
- Boiler feed
- Auxiliary circuits in refineries
- Auxiliary circuits in industry (Paper, Food, Synthetic Fibers, Others.)

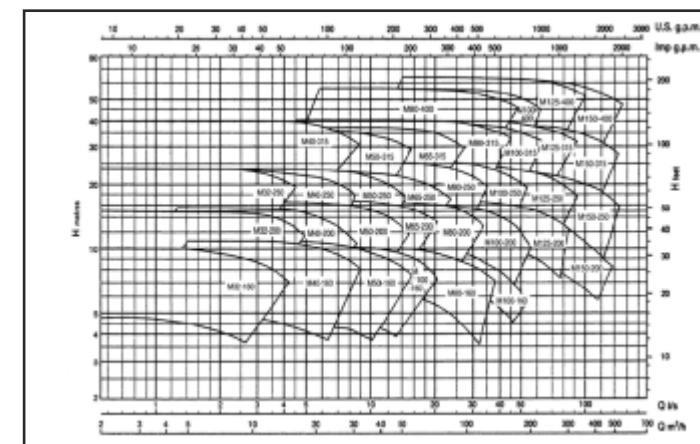
DESIGN

Horizontal, single stage, end suction centrifugal pump dimensionally built to ISO 2858 and technical specification DIN 24256 / ISO 2858. The back pull out design allows for easy maintenance and repair as the rotating element may be removed without disturbing the pipe work. Pump has wear rings as standard and lifting eye on bearing bracket.

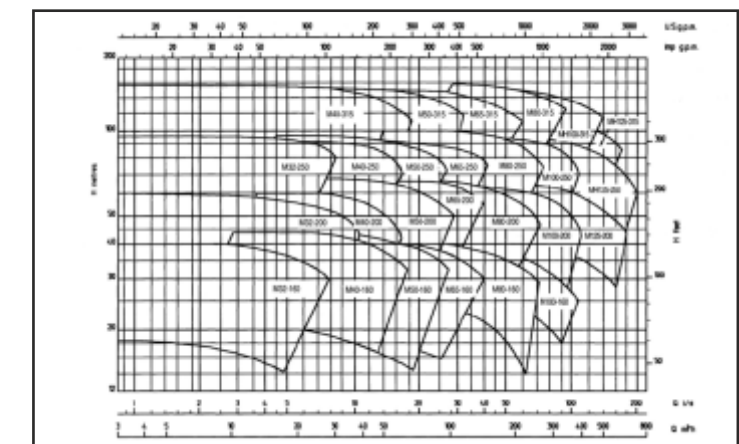
OPERATING DATA

	50 Hz	60 Hz
Delivery size	32 mm to 150 mm	
Flow	up to 540 m ³ /hr	630 m ³ /hr
Head	up to 160 m	
Temperature	up to 160° c	
Speed	up to 2900 rpm	3500 rpm

SELECTION CHART - 1450 RPM



SELECTION CHART - 2900 RPM





HTP

Hot Oil Air Cooled Pump

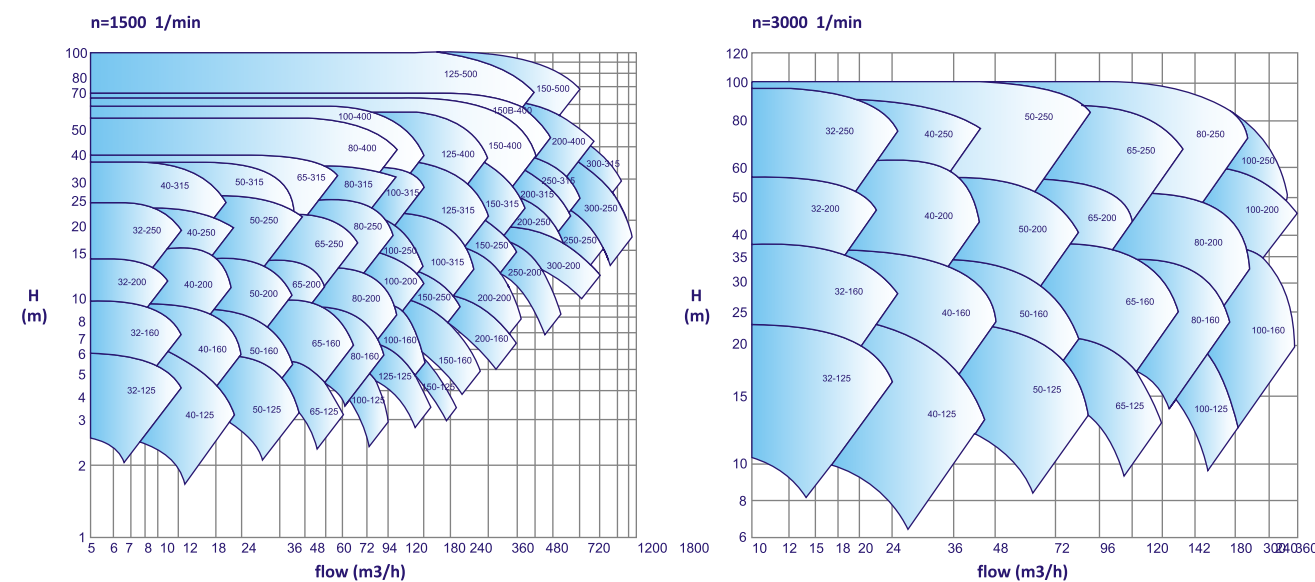
APPLICATION

To support core markets which are Oil and Gas, Textile, Chemical, Paper and Sugar, Plastic, Pharmaceutical & Food, Plywood, Rubber, Water, and Industrial Applications.

The JEC Pump is a horizontal volute casing, single stage centrifugal pump. is manufactured in accordance with Din 24256 (ISO 2858) standard. Designed for thermic fluids and hot water process conditions, Sturdy discharge cover designed for high stiffness, Optimised heat barrier & low wear. Design variant with bearing for high resistance, Reinforced deep-groove ball bearing with special grease fill for long service life, optimised shaft contour ensures reliable removal of leakage, Highly effective venting contour ensures optimum venting, Confined gaskets, Design variant with mechanical seal in tandem arrangement, Anti-seize plain bearing lubricated by the fluid handled, Optimised hydraulic system yields high efficiency, Impeller trimmed to match the specified duty point, Suitable for variable-speed operation and equipped with motor standard, Easy to maintenance for it's back-pull-out design which allows the pump to be dismantled without disturbing the suction and discharge pipework, Ideal for thermal fluids at 350 C high temperature without needing any type of external air conditioning !

SPECIFICATIONS	THERMAL FLUID	HOT WATER
Max. Flow Rate	10 to 750 m3/h	10 to 750 m3/h
Max. Head	8 to 110 meters	8 to 110 meters
Fluid Temperature	350 °C	80 °C to 180°C
Max. Operating Pressure	16 bar	16 bar
Speed	1450 to 2900 RPM	1450 to 2900 RPM

FLOW CHART



FP

Anti Suction Centrifugal Filter Press Pump



FEATURES

- Semi-open type impeller design to handle slumies with solids
- Side Suction & Top Discharge connection
- Least Leakage due to gland portion on Suction Side
- Harden & Grind Shaft gives longer life
- Heavy duty Oil lubricated bearing housing
- Available in All CI, CI/SS, and SS-316 moc

APLLICATION

- Ideal for Filter Press applications in Dyes, Intermediates,
- Scrubber and Spray Dryer Application.
- Chemicals, Textiles, Ceramics etc. industries
- Oil & Petrochemicals Industries
- Effluent Treatment Plants
- Transferring, Loading, Unloading of Chemicals, Light
- Petroleum Products etc.

TECHNICAL SPECIFICATION

Model	Size	Ele. Motor HP / kw	Pump Speed RPM	Discharge Head Kg/Cm2	Capacity in Liters / Hour
FP-0	25 x 25 mm	1.0/0.75	2900	1.5	3000
FP-1	25 x 25 mm	2.0/1.5	2900	2.0	4500
FP-2	40 x 40 mm	3.0/2.2	2900	2.5	10000
FP-3	50x 50 mm	5.0/3.7	2900	3.8	8000
FP-4	50 x 50 mm	3.0/2.2	1450	1.4	8000
FP-4B	50 x 65 mm	10/7.5	2800	5	10000
FP-5-	65 x 50 mm	15/11	2800	7.5	14000
FP-5B	65 x 50mm	5/3.7	1450	2.4	9000



PPC

Centrifugal Poly Propylene Chemical Process Pump

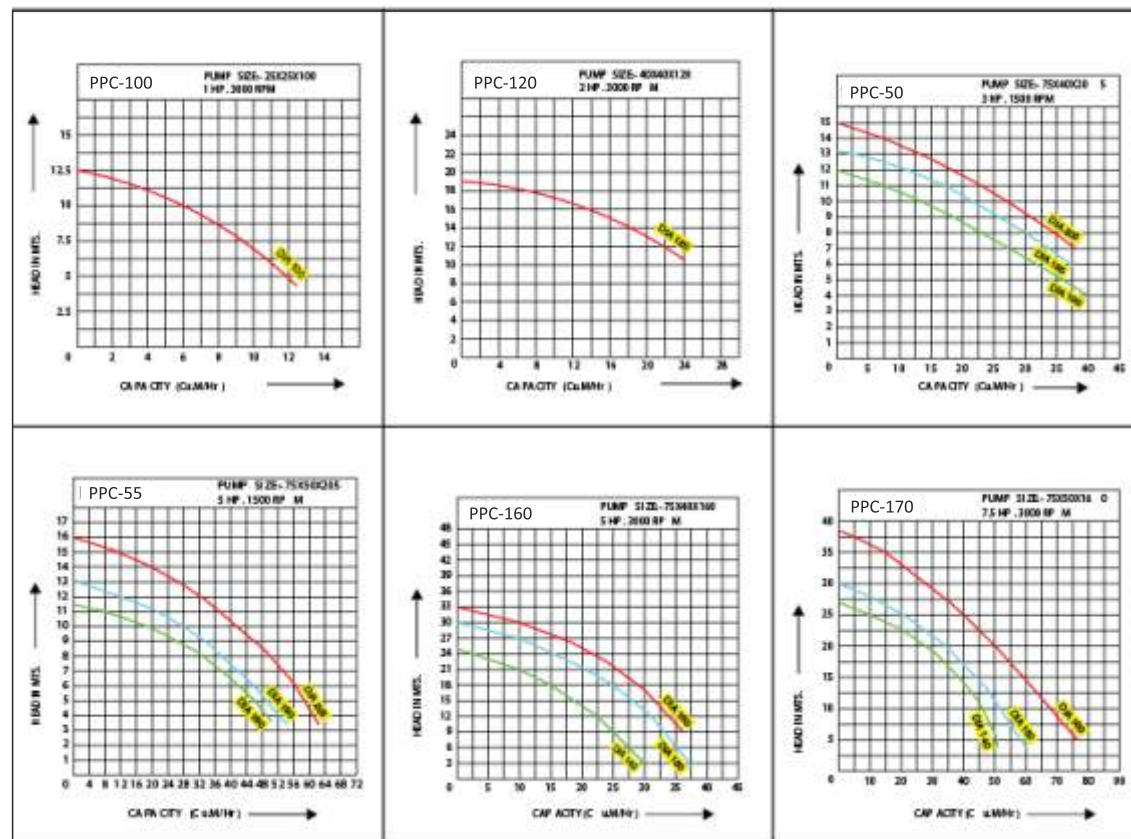
APPLICATIONS

- Transferring of Concentrated HCL From Road Tankers.
- Filter Press for Dyes & Chemical.
- Effluent Treatment.
- Water Treatment Plants.
- Pickling in Steel Rolling Mills.
- Scrubbing of Corrosive Gases Like Cl_2 , Br_2 , F_2 , SO_2 , SO_3 , CO_2 , NH_3 .
- Electro-Plating.
- Descalin

INDUSTRIES WHERE USED

- Dyes and Chemicals.
- Drugs & Pharmaceuticas.
- Causitic Soda Plants.
- Thermal and Atomic Power Plants.
- Fertilizer Plants.
- Copper, Zinc, Smelter.
- Steel Plants.
- TiO_2 Plants.
- Rayon and Staple Fibre Plant. (Bleach Liquor)
- Paper & Pulp Industries.

PERFORMANCE CURVE



PV

Pinch Valve

Pinch valve is a Seat-less & Glandless valve.

Pinch valve is a modified version of laboratory pinchcock. A rubber sleeve is protected under a body made from cast iron, aluminum casting. The service material / fluid passing through does not come in contact with either body covering or any other metal parts of the valve except the rubber sleeve / muff and hence the body and other metal parts are almost permanently not subjected to the corrosive action of the fluid. The flow through the valve is straight and full as that of a pipeline, when the valve is fully open. Further, the collar of the sleeve eliminates use of any gasket. The valve having simple rising spindle type operation makes the valve just simple as other wheel operated valve. The in-between stoppage will allow the desired throttling and Pinch valve thus offers positive control over flowing media

FEATURES

- Seat - less & glandless valves
- Field replaceable elastomer sleeve / muff
- Rubber sleeve / muff has four reinforced lugs
- Flanged ends & drilled to DN, ANSI, BS - 10, IS, etc.
- This valve incorporates all design modification based on our experience & is of sturdy construction & good quality finishing to handle abrasive and corrosive.

RUBBER SLEEVE (MUFF)

Available in Reinforced Natural, Neoprene, Silicon, SBR, Hypalon, Butyl, EPDM etc.

FLANGE DRILLING

As per DIN, ANSI, BS-10 etc.

APPLICATION

Pinch valve finds its best application in handling corrosive slurry, abrasive media, liquid with solid suspensions and many others, which are difficult to handle with seat valve. Pinch valves are also best suited for Vacuum service

RANGE

The flange of the pinch valve can be supplied in accordance to BS, DIN, ASA & IS dimensions. The range for the valve is from 15 mm TO 300 mm. Higher size range can also be developed on request.

MODE OF OPERATION



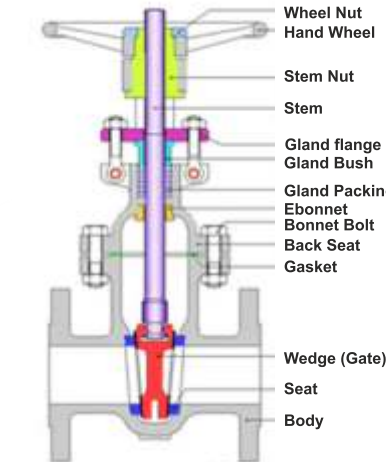


GV

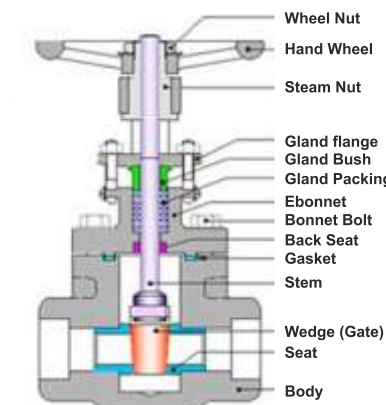
Gate Valve



JEC Gate Valves are Outside Screw, Rising Stem, Bolted Bonnet Construction, Threads are away from the line fluid and easy to lubricate.



Gate Valve
OS & Y Type, Rising Stem, Bolted Bonnet
Design Standard: API 600
Size Range - 1" to 12"
Pressure Rating - 125# / 150# / 300#
End Connection Flanged End



Forged Steel Gate Valve
OS & Y Type, Rising Stem, Bolted Bonnet
Design Standard: API 602
Pressure Rating: 800# / 1500#
End Connection : Screwed / Socket Weld /
Butt Weld End

MATERIAL OF CONSTRUCTION

Cast Iron	IS 210 Gr FG 200
Cast Carbon Steel	ASTM A 216 Gr WCB
Cast Stainless Steel	ASTM A 351 Gr CF 8/CF 8M
Forged Carbon Steel	ASTM A 105
Forged Stainless Steel	ASTM A 182 Gr F304 / F316
End Connection	Screwed AS PER BSP/BSPT/NPT
Socketweld	AS PER ANSI B 16.11
Flanged	AS PER ANSI B 16.5
Pressure Rating	ASA 125#, 150#, 300#, 600#, 800#
Engineering Option	Gear Operated, Electrical Actuated,
Size Range	15 mm to 300 mm

APPLICATIONS
Oil, Gas, Air Slurries,
Heavy liquids, Steam,
Noncondensing gases,
Corrosive liquids

ADVANTAGES
High Capacity
Tight Shutoff
Low Cost
Little resistance to flow

RECOMMENDED USES
Fully open/closed, non-throttling
Infrequent operation
Minimal fluid trapping in line

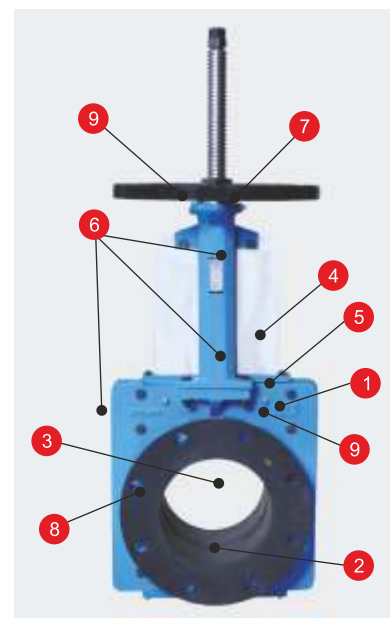
BEST SUITED FOR
Frequent on-off service
Processes where
"instantly" large flow is
needed

LIMITATIONS
Cannot be used for pressure control
Cavitate at low pressure drops
Cannot be used for throttling

KGV

Knife Gate Valve

Smart Solution for Harsh Application



- 1 Available Sizes 3"-36"
- 2 Abrasion-Resistant Slurry Sleeves are Field Replaceable, Provide Bi-directional, Drop-Tight Shut-off and Eliminate the Need for Packing
- 3 100% Full-Port Design
- 4 Heavy-duty 316L stainless Steel Get
- 5 Wiper Blade Cleans debris from Gate as it strokes
- 6 Open/Close Lock-Out feature (optional)
- 7 Robust Corrosion-Resistant ductile iron yoke
- 8 Slotted Flange Holes for Easy through-Bolt installation
- 9 Grease Fittings for Gate and Stem Lubrication

APPLICATIONS

- Powder handling in silos
- Pulp and Paper Plants
- Slurry Handling (Chemical Plant & Process Industries)
- Water and Sewage Applications
- Pneumatic Conveying Systems
- High temperature services
- Mining & Power Plants

MATERIAL OF CONSTRUCTION

Body : Made up of one piece solid, rugged and heavy duty casting with flanges. Standard is Ductile Iron. SS 304, SS 316, SS 316L, Alloy 20, CD4MCu available on request.

Knife Gate : High tensile metal sheet SS 316L as standard. Alloy 20, Hestalloxy etc available upon request.

Seat / Sleeve : Available in all materials as per requirement of application. Natural Rubber, Neoprene, EPDM, Viton, Hypalon etc.

Packing : Smooth well machined packing chamber to provide uniform compression of packing and gives zero leakage. PTFE/high temperature graphite asbestos, food grade packing etc available as per application requirement.

Hand Wheel : Cast Iron, epoxy painted.

When open, the KGV Valve's reinforced elastomer sleeves seal against each other and provide a 100% full-port opening which minimizes turbulence and wear. In this open position, the seats isolate and protect all metal parts of the valve from coming in contact with the process. When closed, the sleeves provide a drop-tight seal in both directions.

SUPERIOR SLEEVE DESIGN

JEC valve seat is made up of two highly resistant, long lasting sleeves made up of natural rubber with metallic core. It's well studied and patented hollow design allows for maximum flexibility on passing through the gate, minimizing the effort necessary for its operation.

The two sleeves are in permanent contact with each other so that there is total flow. Considering that the knife gate valve is specially designed to work with abrasive slurries, this design of sealing provides constant protection the body because the working media is not in direct contact with the body.

For easy maintenance the sleeves can be fully replaced from the outside of the valve as a complete unit and no need of flange rubber gaskets to make tightness between the valve and flanges.

