



Slide Gates / Sluice Gates  
Open Channel Gates  
Bulk Head Gates  
Roller Gates  
Weir Gates  
Flap Gates  
Stop Logs



*When Every Drop Counts*

## ***Innovation & leadership for over 60 years***

Jash Engineering Ltd is an ISO 9001-2008 certified company manufacturing a wide range of flow control products for the water and waste water industry. Established in 1948, today Jash is one of the market leaders in water control gates, fine screens and knife gate valves used in the water and waste water industry around the world.

Jash is exporting these products to over 25 countries around the world. Jash presently exports its products to USA, Canada, Britain, France, Germany, Belgium, Norway, Sweden, Kazakhstan, Turkey, Kuwait, Saudi Arabia, Jordan, Oman, Bahrain, UAE, Singapore, Malaysia, Thailand, Indonesia, Vietnam and Hong Kong and many more.

Jash Engineering Ltd has over 60 years of experience through every conceivable application. This coupled with state of the art designing, manufacturing & testing techniques has resulted into products which are technically superior, long lasting and virtually trouble free. For these reasons, Jash is one amongst the few companies worldwide which is often specified & chosen by leading consultants and clients for their requirement of reliable flow control equipment in their projects.

Brief details on the products offered by Jash are given hereunder. In addition to these products, the company also offers various custom built products to suit client requirement. Additional details on Jash products or special designs are available up on request.

### **SLIDE GATES / SLUICE GATES / PENSTOCKS**

**APPLICATION :** These are vertically sliding gates used for isolation / control of water flowing in and out of a closed conduit / orifice for Seating and / or Unseating water head application. These can also be offered as downward opening weir gates such that when the gate is moving downwards the water flows only from the top of the gate while the gate is sealed along the bottom and sides. These can be operated manually, electrically, pneumatically or hydraulically as per the specific requirement of the client.

#### **CAST IRON SLUICE / SLIDE GATE**

Standard	: AWWA C560, IS-13349, BS-7775.
Mounting	: Wall / Pipe Thimble mounted / Wall mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Metal to Metal & Metallic to non metallic.
Water Heads	: Up to 40 meters (120') seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.
Optional Material	: Alloy cast iron with added Nickel.



#### **STAINLESS STEEL SLUICE / SLIDE GATE**

Standard	: AWWA C561, BS-7775.
Mounting	: Wall / Pipe Thimble mounted / Wall mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to 30 meters (100') seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



#### **ALUMINUM SLUICE / SLIDE GATE**

Standard	: AWWA C562.
Mounting	: Wall mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 2000 x 2000 mm (80" x 80")
Sealing	: Nonmetallic.
Water Heads	: Up to 6 meters (20') seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



## COMPOSITE SLUICE / SLIDE GATE

Standard	: AWWA C563.
Mounting	: Wall mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 3000 mm (120" x 120").
Sealing	: Nonmetallic.
Water Heads	: Up to 20 meters (65') seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



## HDPE SLUICE / SLIDE GATE

Standard	: JASH
Mounting	: Wall mounted
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 1800 x 3000 mm (72" x 120").
Sealing	: Nonmetallic.
Water Heads	: Up to 6 meters (20') seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



## OPEN CHANNEL GATES

**APPLICATION :** These gates are embedded / wall mounted / fixed in between two parallels of an open channel or mounted at the end of an open channel to isolate flow within as well as out of an open channel. These are suitable for seating / unseating water head up to the height of shutter / gate / disc. These gates are mostly self contained type with the operating arrangement mounted on yoke provided across the two side guides. These can be operated manually, electrically, pneumatically or hydraulically as per the specific requirement of the client.

### CAST IRON OPEN CHANNEL SLIDE GATE

Standard	: JASH
Mounting	: Wall mounted / channel mounted / channel embedded.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Metallic / non metallic.
Water Heads	: Up to Door depth seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



### STAINLESS STEEL OPEN CHANNEL SLIDE GATE

Standard	: AWWA C513.
Mounting	: Wall mounted / channel mounted / channel embedded.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to Door depth seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



### ALUMINUM OPEN CHANNEL SLIDE GATE

Standard	: AWWA C513.
Mounting	: Wall mounted / channel mounted / channel embedded.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to Door depth seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



### HDPE OPEN CHANNEL SLIDE GATE

Standard	: JASH
Mounting	: Wall mounted / channel mounted/channel embedded.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 1800 x 3000 mm (72" x 120").
Sealing	: Nonmetallic.
Water Heads	: Up to Door depth seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



## STOP LOGS

APPLICATION : Stop logs are used for isolation duties in open channel. Stop logs can be of single piece or of multiple pieces stacked together to achieve the desired total height. Depending on size and material of construction, stop logs can be lifted manually or using a lifting beam in conjunction with hoist mounted on tripod or rail. Multi-piece stop logs can also be used for level control.

### STAINLESS STEEL or CARBON STEEL STOP LOGS

Standard	: JASH
Mounting	: Wall mounted / channel mounted / channel embedded.
Frame material	: Stainless steel / Carbon steel painted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200")
Sealing	: Nonmetallic.
Water Heads	: Up to logs stacked height seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



### ALUMINUM STOP LOGS

Standard	: JASH
Mounting	: Wall mounted / channel mounted / channel embedded.
Frame material	: Aluminum / Stainless steel.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to logs stacked height seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.





## COMPOSITE STOP LOGS

Standard	: JASH
Mounting	: Wall mounted / channel mounted / channel embedded.
Frame material	: Carbon Steel painted / Stainless steel.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200")
Sealing	: Nonmetallic.
Water Heads	: Up to logs stacked height seating / unseating.
Leakage	: Less than 0.6 liter (0.05 Gallon) / minute / meter (foot) of sealing perimeter.
Optional	: Lower leakage rate & larger size on request.



## FLAP VALVES / AUTOMATIC DRAINAGE GATES

APPLICATION : These are used for automatic drainage from outfall structures to rivers, estuaries and sea. These are also used for preventing reverse flow during flood from rivers / estuaries and high tide from sea. These can be offered in single or multi door design depending upon size.

### CAST IRON FLAP VALVE / GATE

Standard	: JASH
Mounting	: Wall mounted / pipe flange mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200") or up to 3000 mm diameter (125").
Sealing	: Metallic / Nonmetallic.
Water Heads	: Up to 10 meters (32') seating.
Leakage	: Nominal leakage can be experienced. However, it is not unusual to have zero leakage.



### STAINLESS STEEL FLAP VALVE / GATE

Standard	: JASH
Mounting	: Wall mounted / pipe flange mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 3000 x 5000 mm (125" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to 10 meters (32') seating.
Leakage	: Nominal leakage can be experienced. However, it is not unusual to have zero leakage.



### COMPOSITE HDPE & RUBBER FLEXIBLE TYPE FLAP VALVE / GATE

Standard	: JASH
Mounting	: Wall mounted.
Sizes (W x H)	: From 150 x 150 mm (6" x 6") up to 5000 x 5000 mm (200" x 200").
Sealing	: Nonmetallic.
Water Heads	: Up to 10 meters (32') seating.
Leakage	: Nominal leakage can be experienced. However, it is not unusual to have zero leakage.



## CARBON STEEL GATES

Jash also offers custom built slide gates / bulk head gates / fixed wheel gates in carbon steel construction for isolation duties in water intake structures, forebay structures, conveyance canals etc. These are manufactured in sizes up to 6000 x 5000 mm (240" x 200") and can withstand heads up to 30 meters (100'). These can be offered with varied types of sealing arrangement and constructional features to offer reasonably leak tight operation.



Jash has supplied 146 nos Stop shutters to Skanska USA for its Catskill & Delaware Water Treatment UV light disinfection facilities for New York, USA. The order comprised of 100 Nos – 2134 x 3625 mm (7' x 12'), 24 Nos – 1524 x 3658 mm (5' x 12'), 12 Nos – 1524 x 3200 mm (5' x 10.5'), 10 Nos – 2134 x 1219 mm (7' x 4') size and all the stop shutters were delivered within 7 months period, during year 2009-10. This illustrates capability of Jash to execute such large projects within a short period.



Picture shows carbon steel stop shutters for Skanska USA under painting in Jash facility .

## FRP GATES ( An Innovative solution product for corrosive applications)

Jash offers custom designed gates manufactured using Fiber Reinforced Plastic (FRP) material for use in effluent, chemical and seawater applications.

Historically other companies supply FRP gates manufactured using carbon steel internal structural reinforcements, with exterior covering/coating of FRP to try to withstand corrosive environments, fluid mediums. This type of fabrication is heavy and can be easily susceptible to internal carbon steel corrosion, due to the FRP (cladding) coating being compromised, because of any stress crack, surface tear, pin hole or surface puncture. Two differing coefficient of thermal expansions of these different materials, in a changing temperature environment may also create problems.

Jash has developed a gate design which eliminates the above problems and is made entirely from Fiber Reinforced Plastic Material, without any carbon steel internal reinforcements. We are able to offer this design for applications which require small to medium sized gates subject to water heads up to 3 meters (10'). These gates are supplied with materials to suit the environment in which they are to operate reliably for many years. For seawater installations Jash FRP gates can be substantially more economical than other gates designed from duplex/super duplex materials.

Furthermore the customer is assured of a safe and structurally sound gate, as Jash subjects each gate to an in house hydrostatic water unseating test and leakage expectations. These results are certified and a relevant certificate is issued for the gate tested, not a random or historical test record issued.



## MANUFACTURING FACILITY

Jash has one of the most modern manufacturing facilities located at Indore, India. Jash employs over 75 engineers and 500 workers in its facilities to manufacture a range of equipments for the water industry. The present facilities cover an area of 150,000 sq. feet and would be increased to 250,000 sq. feet by year 2011. Jash has an integrated facility comprising of foundry, machine shop & separate carbon steel and stainless steel fabrication plant. Availability of these diversified facility enable Jash to competently and timely produce excellent products for water & waste water industry world wide.

### FOUNDRY & FABRICATION

- Integrated foundry to cast single piece casting weighing up to 15,000 kgs (33,000 pounds).
- Team of welders qualified as per ASME Boiler & Pressure Vessel code section 9:1962.
- In-house physical and chemical testing facility and positive material identification facility.
- Dye Penetration and MPI testing for all critical weld joints.



Foundry



Fabrication

### MACHINING

- State of the art CNC milling, turning & boring machines for precision machining.
- Battery of small and large machines to machine jobs up to 7 x 3.5 x 1.6 meters (23' x 11.5' x 5.3').
- CNC Water-jet cutting machine for heatless cutting of steel plates up to 50 mm (2") Thickness.



CNC milling machine



CNC Water-jet cutting

### ASSEMBLY & TESTING

- Assembly facility suitable for 10,000 valves & gates per year.
- Assembly facilities suitable for gates weighing up to 25,000 kgs. (55,000 pounds).
- Hydrostatic pressure testing facility for valves up to 3000 mm (120") diameter & gates up to 3500 x 5000 mm (140" x 200") size.
- Every gate is pressure tested for compliance and certified before dispatch.



Sluice gate assembly plant



Sluice gate testing facility

### PAINTING & PICKLING

- In-house shot blasting facility for large size components.
- Bath pickling for stainless steel products.
- State of the art airless painting facility and fusion bonded epoxy painting for small valves.
- Coating thickness, paint adhesion and pinhole testing facility.
- Painting complying to AWWA / specific contractual requirements.



Shot blasting room



Painting booth



*Water - One of the nature's most vital & precious resource can no longer be taken as an un-ending free gift. Increasing population & urbanization is resulting into severe pressure on this resource. Hence better preservation and efficient distribution of this vital resource is increasingly becoming an important consideration for all mankind.*

*We at Jash understand this very well and consider this as our obligation to society. For us 'Every drop of water counts' and to achieve this we make products which give superior leakage performance, year after year.*

*Jash has been making gates for controlling the flow of water for over six decades. Jash has designed and manufactured gates for varied applications: in potable water environment, sewage & industrial waste water treatment, reservoirs and water supply systems, water intake structures & cooling system in power, steel & petrochemical projects.*

*This long experience through every conceivable application coupled with state of art designing, manufacturing & testing techniques has resulted in Jash producing products which are technically superior, long lasting and virtually leakage and trouble free.*

*These are the reasons why Jash is the leading choice in supplying equipments for water and waste water industry. Jash is regularly specified & trusted by leading consultants and clients for their requirement of water control gates and equipments, wherever water is required to be preserved or distributed.*



Punggol - Serangoon Pumping Station, Singapore.



Kerajaan Stormwater Management and Road Tunnel (SMART) Project, Kuala Lumpur, Malaysia



Seymore Capilino Filtration Plant  
Greater Vancouver Water District, Canada



## **JASH ENGINEERING LTD.**

Regd. Office & Factory : 31, Sektore 'C', Industrial Area,  
Sanwer Road, Indore - 452015 (M.P.) INDIA

Ph.: 0091-731-2720143, 2721143, 4232900

Fax: 0091-731-2720499

Email : [info@jashindia.com](mailto:info@jashindia.com)

Web Site : [www.jashindia.com](http://www.jashindia.com)

Pictures shown are general, unless specific job names are listed

Manufacturer reserves the right to depart from the catalogue specifications and illustrations