VERSA® PUMP



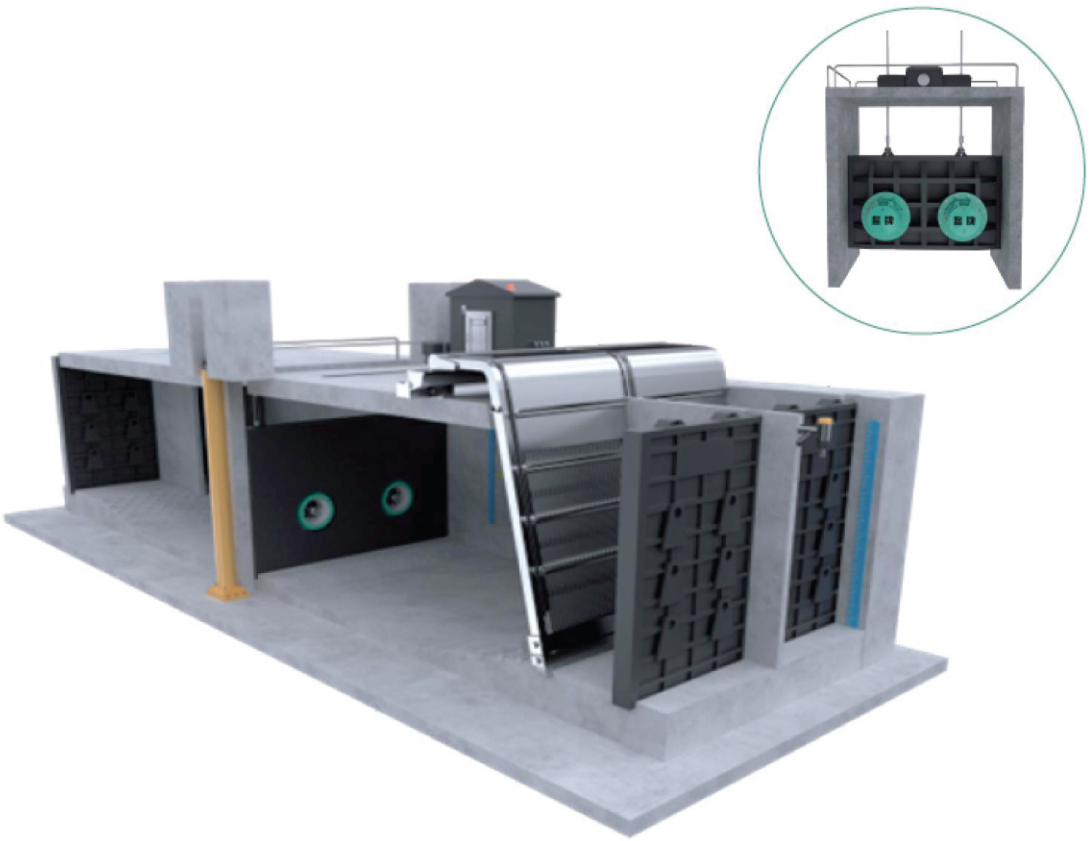
PUMP GATE
PUMPING STATION
PGS SERIES

Pump and Systems for Water Management

VERSA® PUMP

PUMPGATE

The PGS series of PUMPGATE integrates the gate pump and gate into one, and is an integrated system that integrates various auxiliary facilities such as open-close systems, sewage interception systems, liquid level monitoring, water quality monitoring, intelligent control, etc.
Not only can it achieve one-way drainage, but it can also meet the requirements of two-way water replenishment and water circulation. The PGS PUMPGATE should be arranged within the river channel, without occupying additional land area, and without affecting the flood discharge of the river channel and the surrounding water ecological environment.

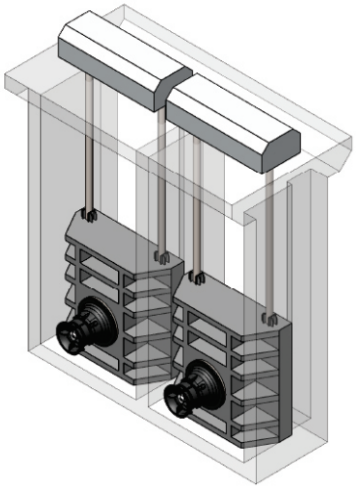


NO-BURN AND ANTI-LEAKAGE

VERSA® PUMP

POWERFUL PUMPING
EFFICIENT OPERATION

PUMPGATE is a reliable solution if a pumping station and reservoir are not an option due to lack of space. If the outside water level is low, the gate pumps and screen will open and discharge inside water by gravity flow. Once the outside water level gets higher, blocking the back flow, the gate pumps close and block the rising wa ter level. If the inside water reaches a certain level, the pump and screen will start operating to forcibly discharge the water inside.

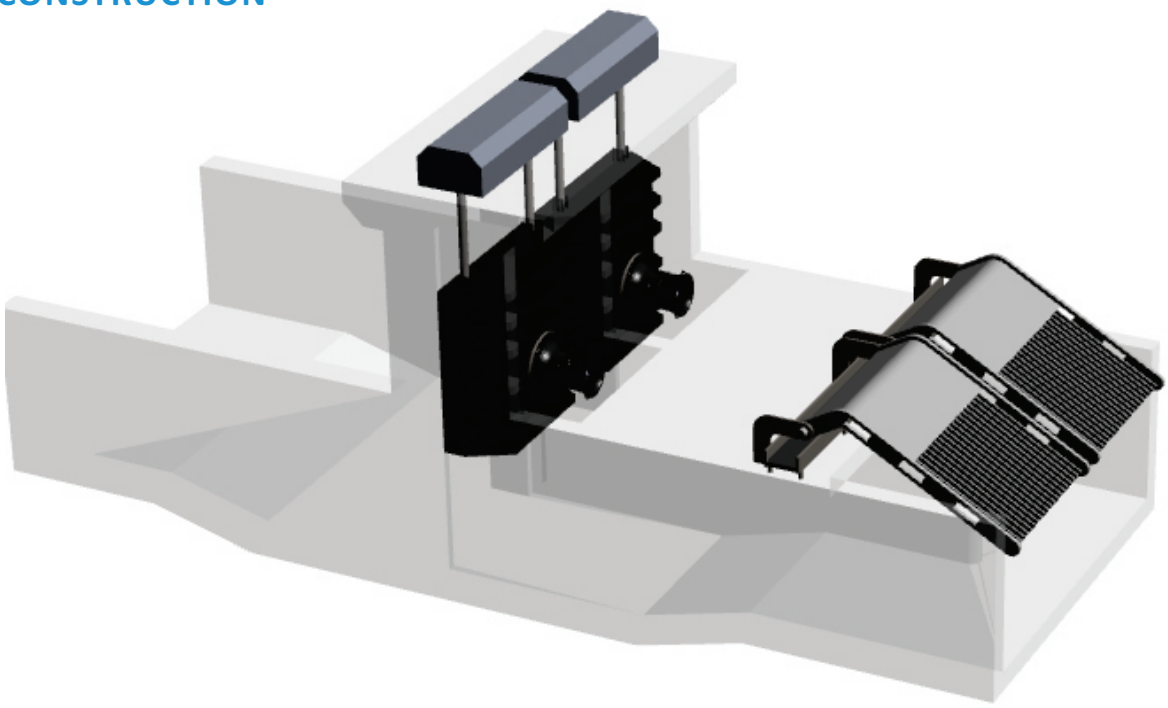


The market-leading high efficiency and compact design make it possible to reduce the size of the pumping station and cost for civil construction work. Built from cast iron or stainless steel, a wide range of variants using different materials, sensors, surface coatings and shaft seal materials are available, ensuring excellent reliability in demanding applications.

The range of PUMPGATE offers:

- Best-in-class hydraulic efficiency
- Market-leading compact and lightweight design
- Backswept self-cleaning hydraulic design that provides great non-clogging performance
- Land saving
- Convenient installation & maintenance
- Intelligent control & efficient operation
- Cost saving and low maintenance cost

CONSTRUCTION



NO-BURN AND ANTI-LEAKAGE

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APPLICATION AND BENEFITS

These axial flow pumps are designed for high flow up to 2400m^3/min and head up to 8m. Higher flow and head is available on request. Built to handle large amount of water, the pumps are ideal for a wide range of applications such as:

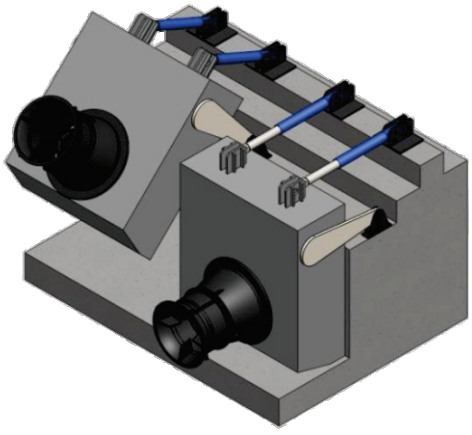


- Flood and storm water control
- Large volume drainage and irrigation
- Water level control in coastal and low-lying areas
- Filling and emptying water from dry docks and harbor



Benefits

- Serves as a flood gate and pump simultaneously
- Equipped with submersible pumps, the gates can be installed on an existing waterway
- Required small space, ideal for both urban and rural areas





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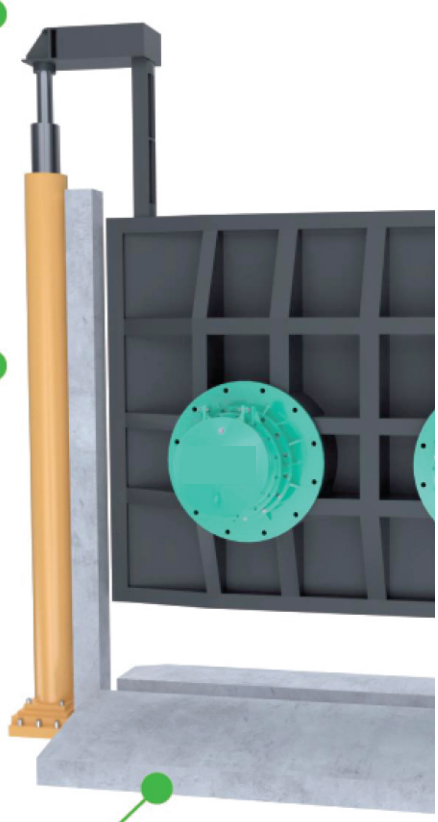
PGS SERIES

PUMPGATE Technical characteristics

Install the gate pump directly on the gate to form an PUMPGATE. This structure reflects the advantages of small footprint and saving civil engineering investment in drainage engineering, water conservancy, and hydropower engineering.

The net width of the gate opening and the flow capacity of the river channel are both increased by more than one time compared to traditional gate stations.

The use of PGS new generation gate pump ensures that after being connected to the gate, the center of gravity of the pump is within the center of gravity plane of the gate, making it easy for the integrated pump gate to achieve balanced opening and closing. Perfectly equipped with integrated pump gates, it plays a huge advantage in the fields of municipal engineering, gate stations, and irrigation and drainage.

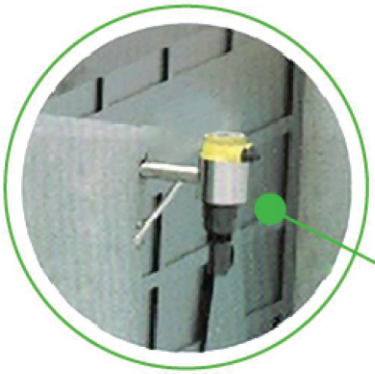


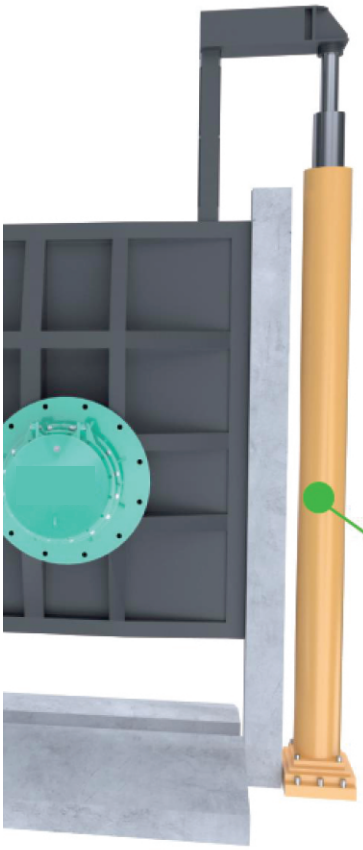
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PUMPGATE

Technical characteristics





Equipped with an internal and external and bidirectional liquid level monitoring and control system, the gate and pump can be controlled to start and stop based on water level conditions, and the pump set can be controlled to achieve bidirectional drainage.

The PGS PUMPGATE is equipped with a powerful liquid level monitoring and operation control system.

The vertical hydraulic fast open- close gate system structure greatly enhances the ability of the gate station to deal with various river water level issues and accidents.

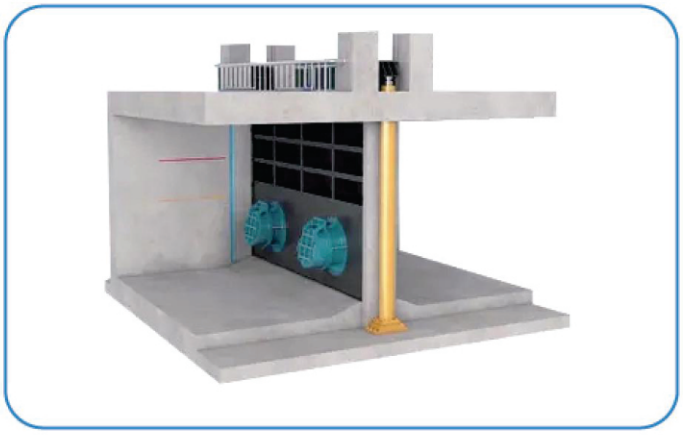
Equipped with a general system control center, the data of mechanical systems, electrical systems, and monitoring systems can be integrated into the cloud platform, enabling users, manufacturers, agents, and pump gate sites to achieve real-time monitoring.

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PGS SERIES

PUMPGATE

nstalls Way



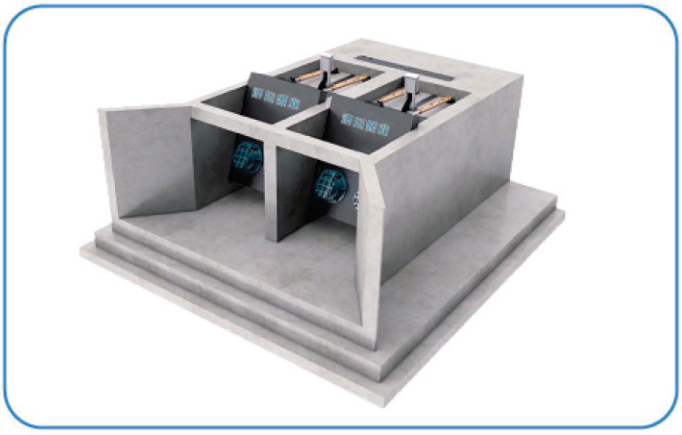
①

Hydraulic vertical open-close

This system fully utilizes the sturdy frame and spatial position of the gate in design, and ensures the most reasonable structural strength through FEA finite element analysis.

②

Upward flipping open-close



The PGS PUMPGATE is made of cast iron or stainless steel, and the gate opening angle and open-close speed meet various application conditions and design requirements, making it durable and durable.

NO-BURN AND ANTI-LEAKAGE

PUMPGATE

nstalls Way



③

Vertical open-close of screw

The screw vertical open-close gate system structure fully considers the construction area in design and occupies a small area.



④

Vertical open-close of winch

Fully utilize the sturdy frame and spatial position of the gate in design to ensure flow velocity and avoid accidents.

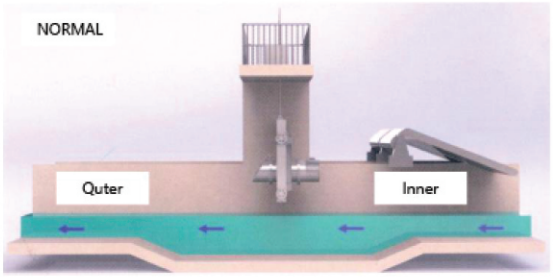
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PGS SERIES

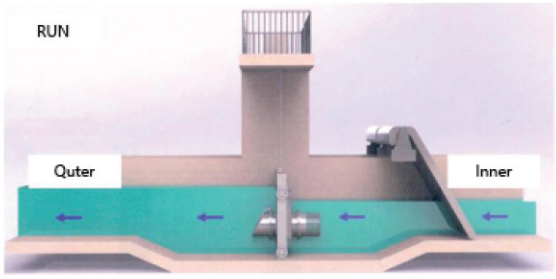
PUMPGATE

Working principle

Forced Drainage Mode

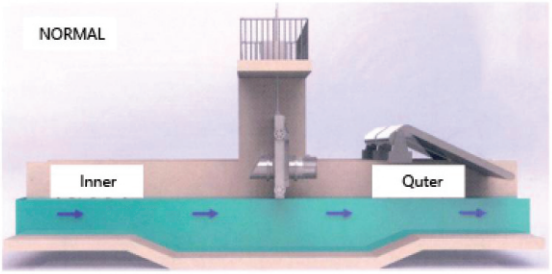


When the water level of the inner river is higher than that of the outer river, PGS PUMPGATE is in a non working state, and the water body flows naturally before and after the pump gate.

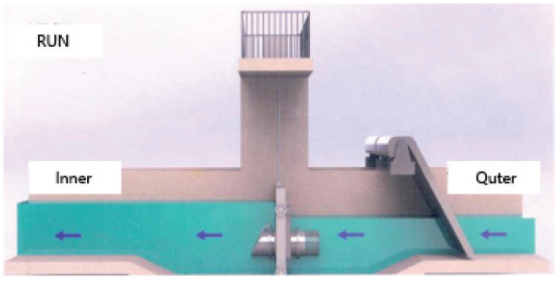


The system detects that the water level in the inland river has reached the preset level, and the pump gate is closed. When the water level in the inland river rises to the alarm level, the gate pump starts and pumps water to the outer river.

Active Water Replenishment Mode



Normally, when there is no need to replenish water in inland rivers, the integrated pump gate is fully opened and the river water is discharged by gravity.



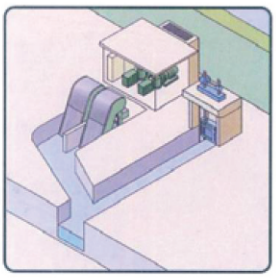
When the fluidity of the river water is insufficient, turn on the gate pump to enhance the power of the river. In the dry season, it is possible to pump the outer river water to the inner river to achieve water diversion and replenishment.

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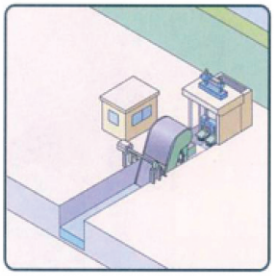
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PUMPGATE Advantage analysis

Traditional Pump Station



PGS PUMPGATE



	Traditional Pump Station	PGS PUMPGATE
Cover an area	Large	Small
Investment cost	High	Low
Construction period	Long	Short
Intelligent monitoring	Manual duty	Intelligent self-control
Navigation capacity	Effect	No effect
Installation	Install separately	Overall installation
Sole supplier	NO	YES

NO-BURN AND ANTI-LEAKAGE

PGS SERIES

PUMPGATE Technical parameters

Core functions

Double slope drainage **Zero leakage risk**



Gate pump

It has structural advantages in operating conditions.

PGS PUMPGATE is an integrated equipment, with specific parameters configured according to user needs.

Type	Technical Parameter	Notes
Model	JCBZ35-1-1—JCBZ140-4-10	
Flow Range	640-144000m³/h	
Head Range	0.5-8m	
Power Range	7.5-2000kW	
voltage Range	380V、660V、6kV、10kV	Customizable for various voltage motors
Medium conditions	PH5-9	Clear water or mild sewage
Allow passage through particle diameter	≤ 1/10 outlet diameter	No large amount of fiber debris
Usage environment	TEMP: -20℃-120℃	H: 95%
Maximum working head	Unidirectional compression Forward:10m Reverse:5m	Bilateral compression, both 10m
Design head	≤ 15m	(Including recoil head)
Net width of orifice	0.5-10m	Selected based on customer parameters
Net height of orifice	0.7-10m	
Design water level of inland rivers	1-7m	
Design water level of outer rivers	1-9m	

Please contact the company for special models and specifications.

NO-BURN AND ANTI-LEAKAGE

VERSA® PUMP

PUMPGATE

ntelligent monitoring

The PGS PUMPGATE Intelligent Control Center can monitor multiple systems, achieve intelligent opening and closing, improve the river water environment, and optimize the water ecosystem.

VERSA Smart Water Control Room



NO-BURN AND ANTI-LEAKAGE



VERSA® PUMP