# DURGA VALVES

SLUICE GATES

## OPEN CHANNEL, WALL MOUNTED STOP LOGS, TRASH RACK

MADE IN India

www.dvpl.co.in

PROUDLY
MANUFACTURED IN INDIA

DVPL
www.dvpl.co.in

PRESSURE,
FLOW, LEVEL,
& LEAKAGE
SOLUTIONS

THE VALVE VALUE

# DVPL A - SYNOPSIS

Durga Group of Companies (Now Durga Valves Private Limited – DVPL) was founded by Shri Prasanta Roy, now the group Chairman in 1974 with a vision to be a leading and comprehensive Quality Valves manufacturer. Today, DVPL is one of the leading Valve manufacturers of Superior International Quality Valves. A key attribute of DVPL is its exceptional service to its customers, this includes Pressure, Leakage, Level, Flow control solutions, and Field assistance. DVPL is a well-established company with fully equipped offices throughout India, a covered area of more than 100,000 square feet, and a state-of-the-art factory near Tulsibaria, Howrah.

**We have recently executed orders for various irrigation and water supply projects in India:**

- 2700 mm DIDF BFV
- 2000 mm Rising Spindle Sluice Valve
- 2600 mm x 2500 mm SS316 Open Channel Gate
- 3-Stage and 4-Stage Surge Suppression & vacuum breaker Valves
- Metal to Metal Seating BFV

Our various valves and packaged solutions meet the requirements of the following Applications:

- Raw water intake, Pumping operations & Transmission for Drinking Water, Irrigation Etc.
- Water treatment (WTP)
- Potable Water Storage, Distribution & Pressure Management.
- Effluent Transmission, Pumping, Treatment and Disposal
- Fire Fighting applications.
- Cooling Towers.
- Hydro Power generation.
- Power Generation pipelines (RW, CW, Ash Recovery)
- Hydrocarbons (Pipelines, Containers etc.).
- Wastewater transmission, Pumping, and Treatment.
- Lift irrigation Projects.
- Paper, Pulp, Sugar, Cement - Process piping.
- Valves for DC/AC Automation (PLC/SCADA/GPRS)

## APPROVED OR ACCEPTED OR USED BY THE FOLLOWING:

BUREAU OF INDIAN STANDARDS:
ISI MARK FOR SLUICE VALVES IS 14846/2000 UP TO 1200 MM.
ISI PERMISSION ON DUCTILE IRON VALVES (under the existing license)
ISI MARK FOR THE NON-RETURN VALVE IS 5312/1/84 UP TO 600 MM.
ISI MARK FOR KINETIC AIR VALVES IS 14845/2000 UP TO 200 MM.
ISI MARK FOR THE BUTTERFLY VALVE IS 13095 UP TO 2000 MM.
ISO-9001, 14001, 45001

- CONSULTANTS: TCE, MECON, STUP, NJS, SUEZ, MN DASTUR, MWH, STC, BARC-DCSEM ETC.
- WATER/IRRIGATION & OTHER UTILITIES: Maharashtra Jeevan Pradhikaran Maharashtra Industrial Development Corporation. MAHAGENCO, CIDCO of Maharashtra, WRD Govt. Of Maharashtra, Karnataka Urban WSS And D.B, Bangalore WSS & Sb, Tamil Nadu Water Board, Gujarat Water Infra. Co., GWSSB, Chennai Metro WS&DB, RUIDP, J&K Era, Kwa, BARC-DCSEM, BHEL, KMC, KMDA, Etc.
- MUNICIPAL CORPORATIONS Of Mumbai, Baroda, Surat, Pune, TMC, PCMC, PCNTDA, MBMC, UMC, KDMC, BNMC, Nagpur, Vishakhapatnam, Solapur, Bharuch, Kolkata, Howrah, KMDA, Indore, Ujjain, Kolhapur, Sangli, Bhopal, Lavasa Corpn. Etc.

**DVPL Advantage: Strengths:**

- Proven Quality and Known Establishment
- Comprehensive Manufacturing Range & Large Production Capacity
- Continuous R&D and Efficient Manpower
- In-House Testing Facilities Like; Hydro/Flaw/MPT/Tensile/DPT/Holiday-Spark/Epoxy Dry Film Thickness Etc.
- In-House Powder Coating Plant.
- Corporate Tie-Up with specialized Foundries in India for Superior Consistent Quality.
- In-House Design Facility with Research & Development Team.
- Computerized Hydraulic Testing Machine with Auto Report.
- Positive Attitude and Growth-Oriented Organization & Large Pool of Youngsters.
- Continuous Up-Gradation of Skills and Knowledge
- Fastest Deliveries in The Industry & Substantial Stock Holding Capacity.
- Wide range of MOC – DI/CI/CS/SS/AL/FAB.
- More Than 30 Years' of Experience & Thousands of Installations.
- Clients Prefer to Buy from Us for Reliability Quality & Service.

It is The Knowledge of Experience that makes DVPL a leader in Fluid Management Technology. This passion for generating innovative solutions for Water Management Systems has enabled the company to commission its products in a wide range of applications and Projects.

For DVPL, the Proudest Moments are happening every milli-seconds where our valves are QUENCHING THE THIRST OF MILLIONS OF PEOPLE IN OUR GREAT INDIA. We feel proud to take the Essence of Make-In-India forward.

MADE IN INDIA

DURGA VALVES PRIVATE LIMITED

# WHAT IS SLUICE GATE?

- A sluice gate is a mechanical device used to control the flow of water in canals, rivers, dams, and other hydraulic systems. It typically consists of a vertical sliding gate or barrier that can be raised or lowered to regulate water flow and level.

**Key Components:**

- Gate or Barrier: Made of metal, it acts as an obstruction.
- Frame: The structure holding the gate in place.
- Lifting Mechanism: This can be manual (with a hand wheel or crank) or automated (with electric or hydraulic systems).

**How It Works:**

- When the gate is lifted, water flows underneath.
- When the gate is lowered, water flow is reduced or stopped entirely.

**Common Uses:**

- Dams and Reservoirs: To control water discharge and regulate water levels.
- Irrigation Systems: To direct and manage the distribution of water in agricultural fields.
- Flood Control: To prevent flooding by managing the flow of excess water.
- Water Treatment Plants: To control water flow between treatment basins.
- Hydropower Plants: To regulate water flow to turbines.
- Canals and Navigational Locks: To manage water levels for boat passage.

Sluice gates are critical in water management systems and ensure efficient operation in both natural and engineered waterways.

**Importance of Rectangular Sluice Gates for a Water and Wastewater Treatment Plant:**

- Water and wastewater treatment plants are essential infrastructures that ensure the safe supply of water and the responsible management of waste. One of the critical components in these plants is the sluice gate, particularly the rectangular sluice gate. This component plays a vital role in the regulation and control of water flow. Let's delve into the reasons why rectangular sluice gates are crucial for water and wastewater treatment plants.
- **Regulation of Water Flow**
- Rectangular sluice gates are designed to precisely control the flow of water within the plant. By adjusting the gate, operators can control the volume and speed of water entering different sections. This ability to regulate water flow is crucial for maintaining the balance and efficiency of the treatment process.
- **Sediment Control**
- In water and wastewater treatment, sediment control is essential to prevent blockages and maintain system efficiency. Rectangular sluice gates help in controlling sediment build-up by allowing operators to flush out sediments accumulated at the bottom of channels. This is achieved by opening the gates to increase water flow, effectively washing away sediments.
- **Flexibility in Operation**
- The design of rectangular sluice gates offers flexibility in operation. They can be adjusted to various opening levels, providing precise control over the amount of water passing through. This flexibility is essential for adapting to changing water levels and flow rates, ensuring the plant can handle varying conditions effectively.
- **Durability and Reliability**
- Constructed from robust materials, rectangular sluice gates offer durability and reliability, essential for long-term operation in harsh environments. Their design minimizes wear and tear, reducing maintenance needs and costs. This reliability ensures the continuous operation of the treatment plant without unexpected interruptions.
- **Safety and Emergency Management**
- Rectangular sluice gates are fundamental for safety and emergency management. In the event of an unexpected surge in water volume, such as during heavy rainfall, these gates can be quickly adjusted to manage the increased water levels, preventing overflow and potential damage to the plant infrastructure.
- **Efficient Waste Management**
- For wastewater treatment plants, efficient waste management is critical. Rectangular sluice gates facilitate the separation and removal of waste materials. By controlling the flow, these gates help direct wastewater to appropriate treatment areas, ensuring that waste is effectively processed and treated.

DVPL stands at the forefront of Fluid Management Technology, a position earned through years of expertise and in-depth knowledge. The company is dedicated to creating advanced, innovative solutions for Water Management Systems, which have been successfully implemented in a wide range of projects, both large and small. This commitment to excellence allows DVPL to address complex water challenges with precision and efficiency.

Every day, the impact of DVPL's work is felt as its valves play a crucial role in providing clean, safe water to millions of people across India. These moments of service, however small they may seem, represent a larger vision of improving lives and contributing to the nation's well-being.

As a company, DVPL takes immense pride in supporting the Make-in-India initiative. By manufacturing high-quality, locally-made products, DVPL not only strengthens the country's industrial capabilities but also fosters innovation that resonates globally.

**FABRICATION**

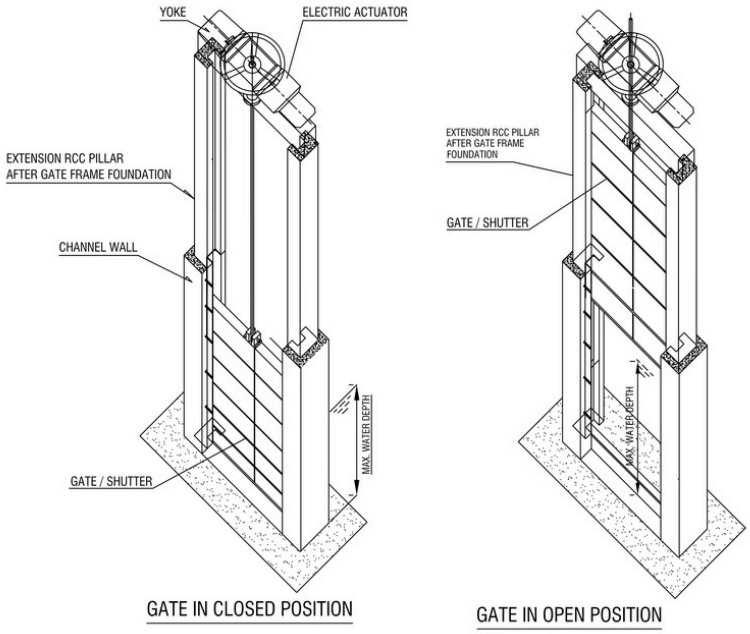
AVAILABLE IN SS 304 316 MS ALUMINIUM

**CAST IRON / DUCTILE IRON/ FABRICATED**

**SS 304 316 LTB2**

**TRIMS AND INTERNALS**

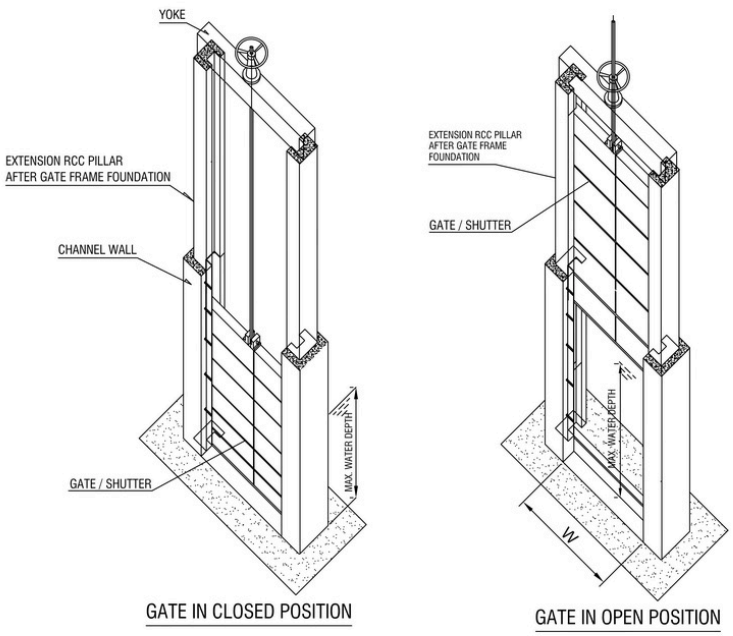
**UPTO 6000 mm WORK DONE**




GATE IN CLOSED POSITION

GATE IN OPEN POSITION

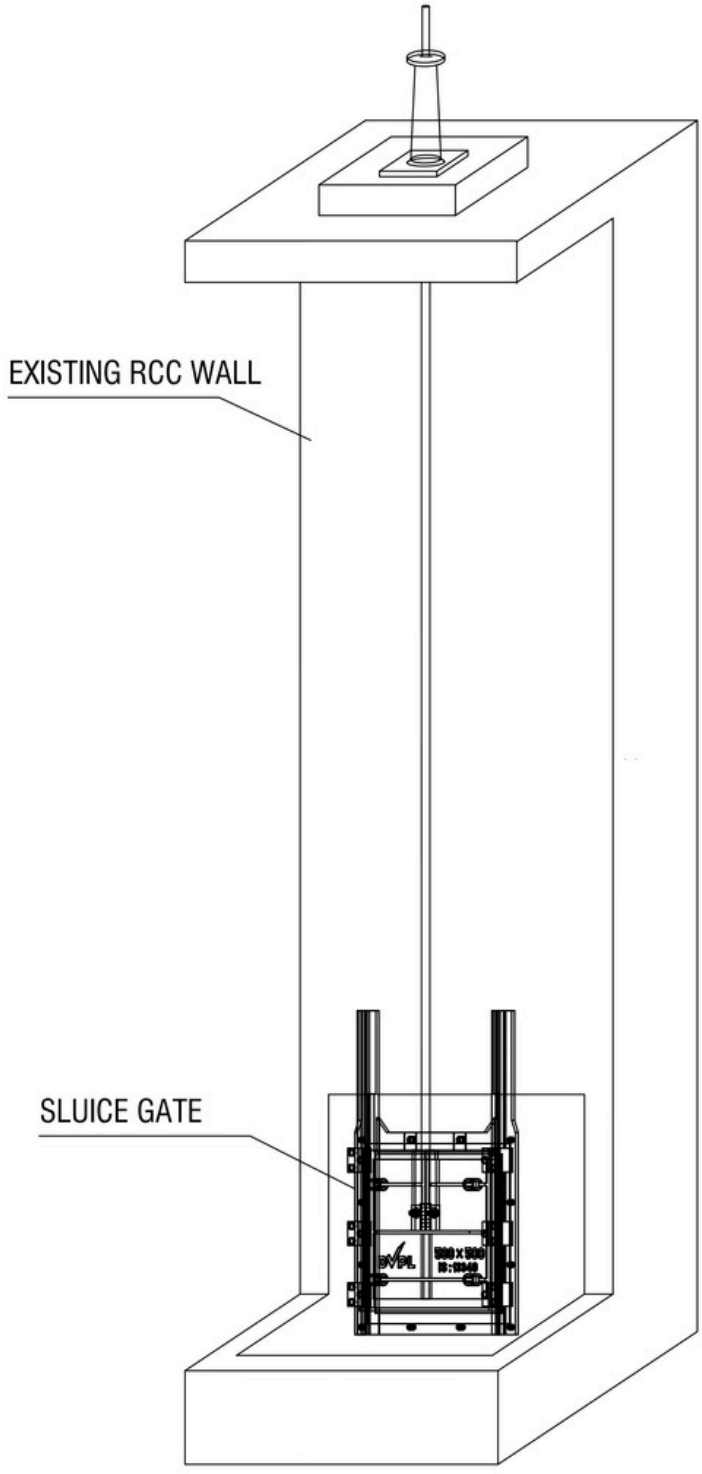
ISOMETRIC VIEW OF OPEN CHANNEL RISING SPINDLE SLUICE GATE



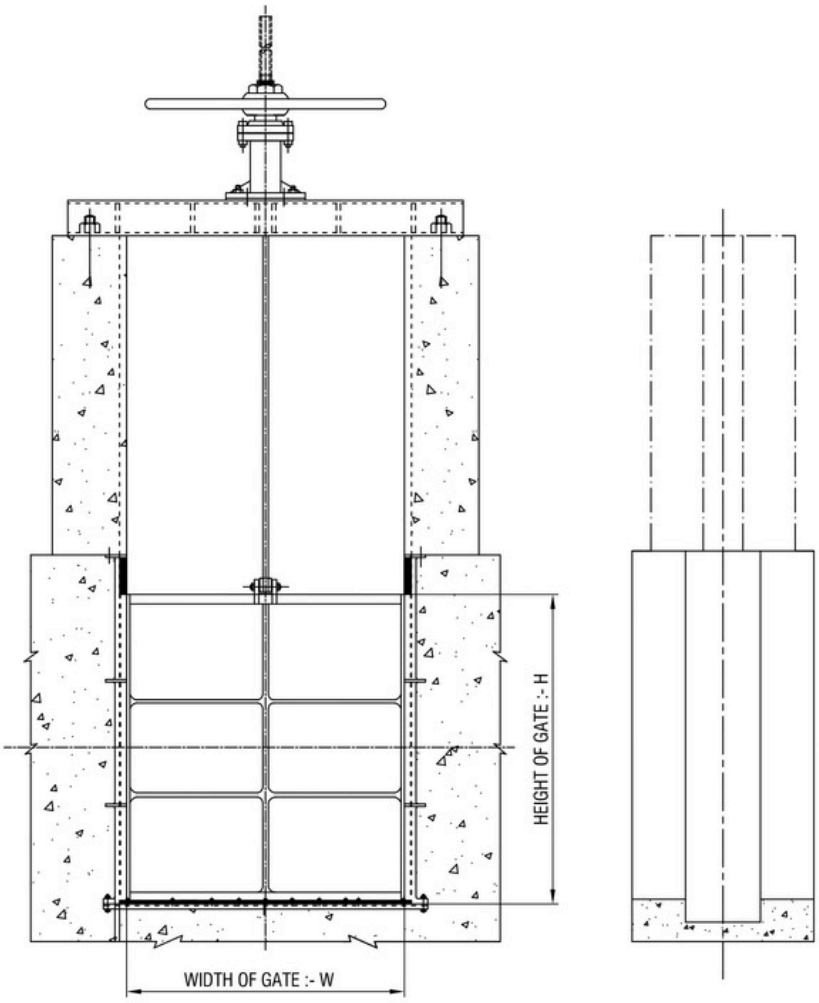

GATE IN CLOSED POSITION

GATE IN OPEN POSITION

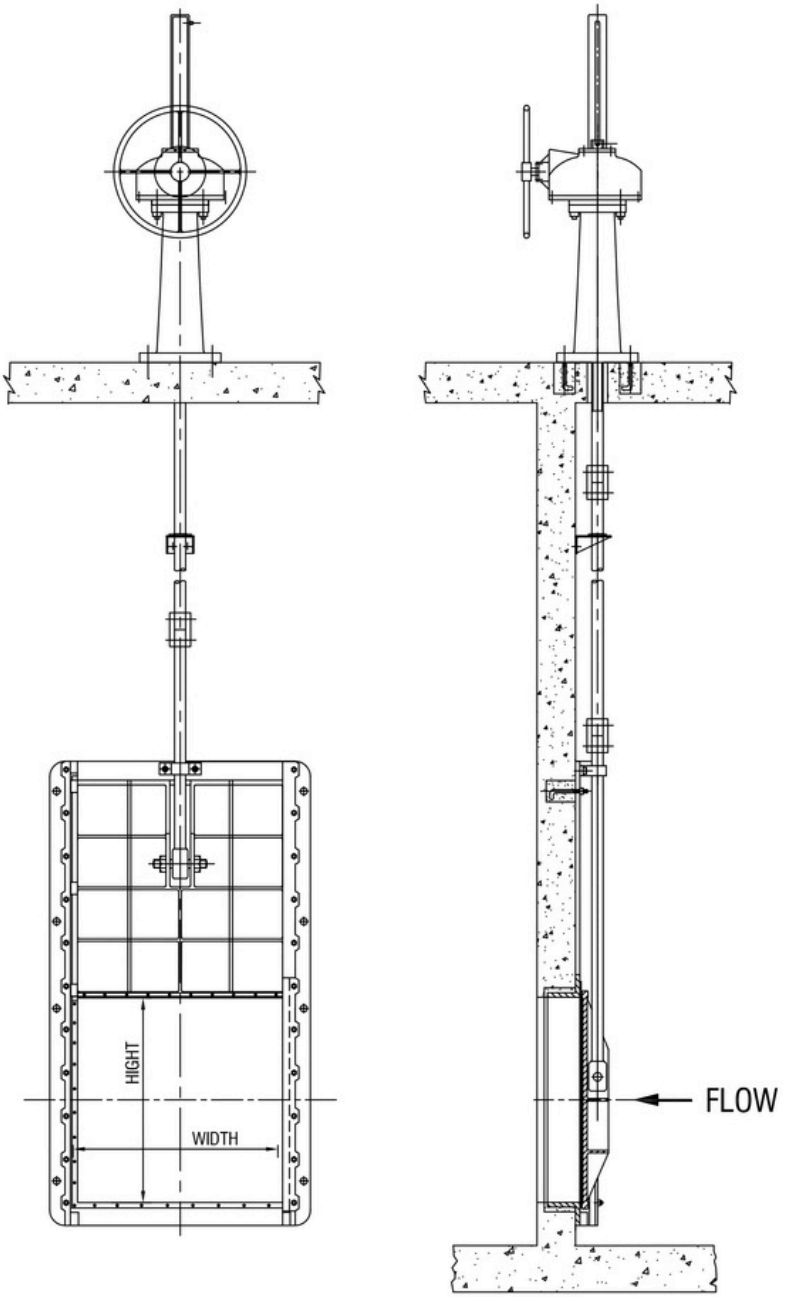
ISOMETRIC VIEW OF OPEN CHANNEL RISING SPINDLE SLUICE GATE




ISOMETRIC VIEW OF THIMBLE MOUNTED SLUICE GATE



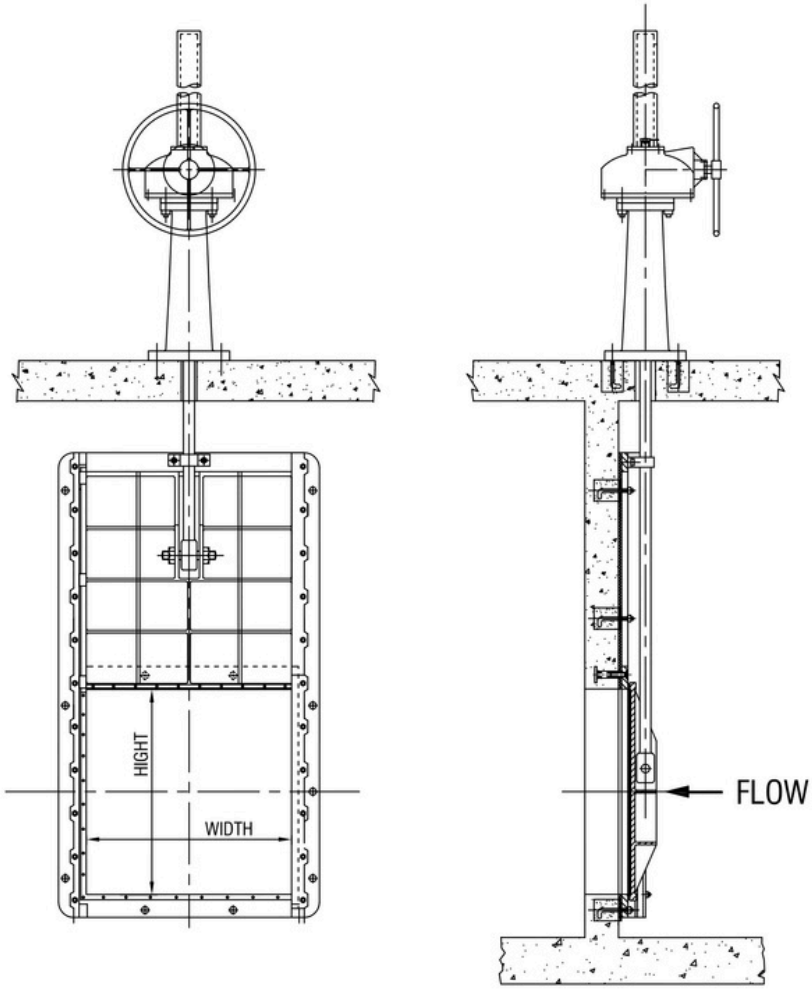

OPEN CHANNEL RISING SPINDLE SLUICE GATE




GATE IN OPEN POSITION

GATE IN CLOSE POSITION

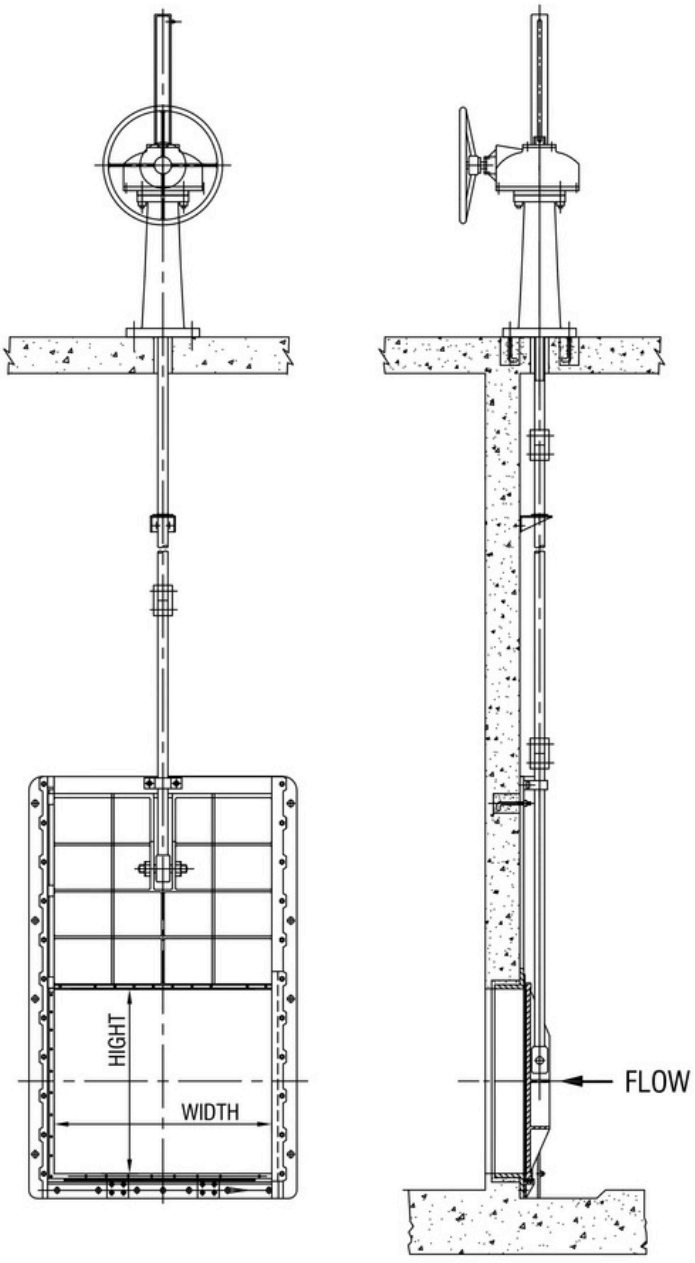
# WALL MOUNTED RISING SPINDLE SLUICE GATE : IS 3042 (WITH SPIGOT)




GATE IN OPEN POSITION

GATE IN CLOSE POSITION

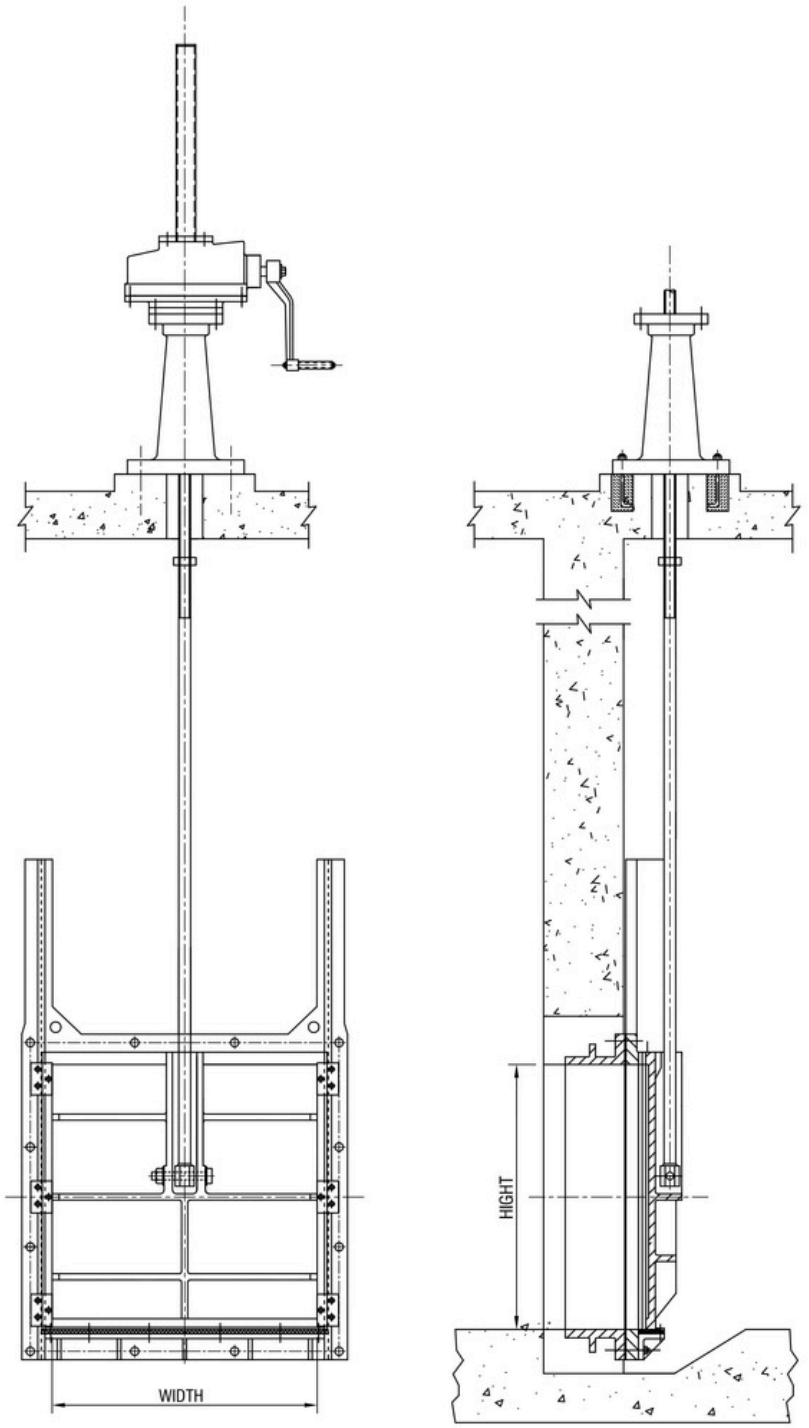
# WALL MOUNTED RISING SPINDLE SLUICE GATE : IS 3042 (WITHOUT SPIGOT)



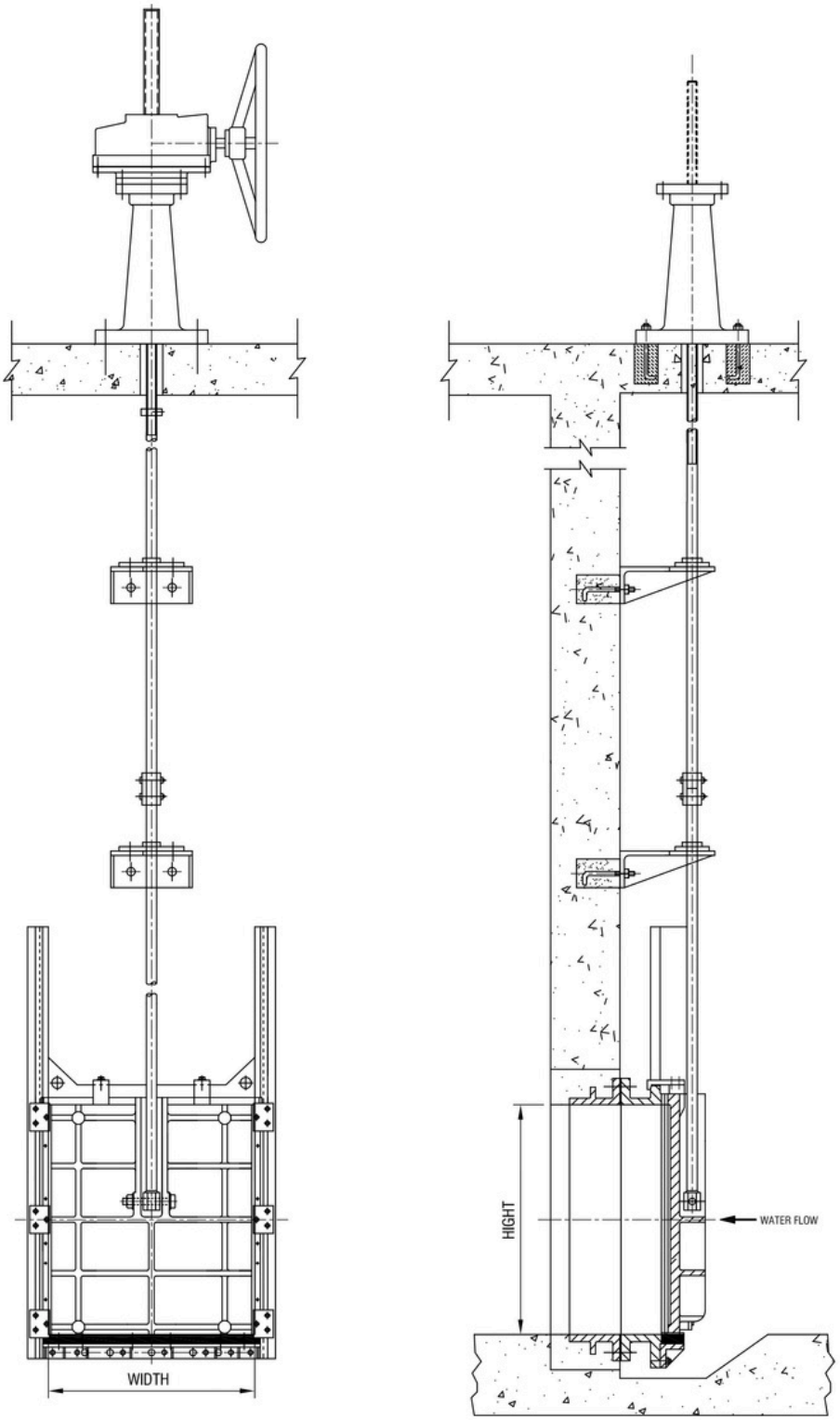

GATE IN OPEN POSITION

GATE IN CLOSE POSITION

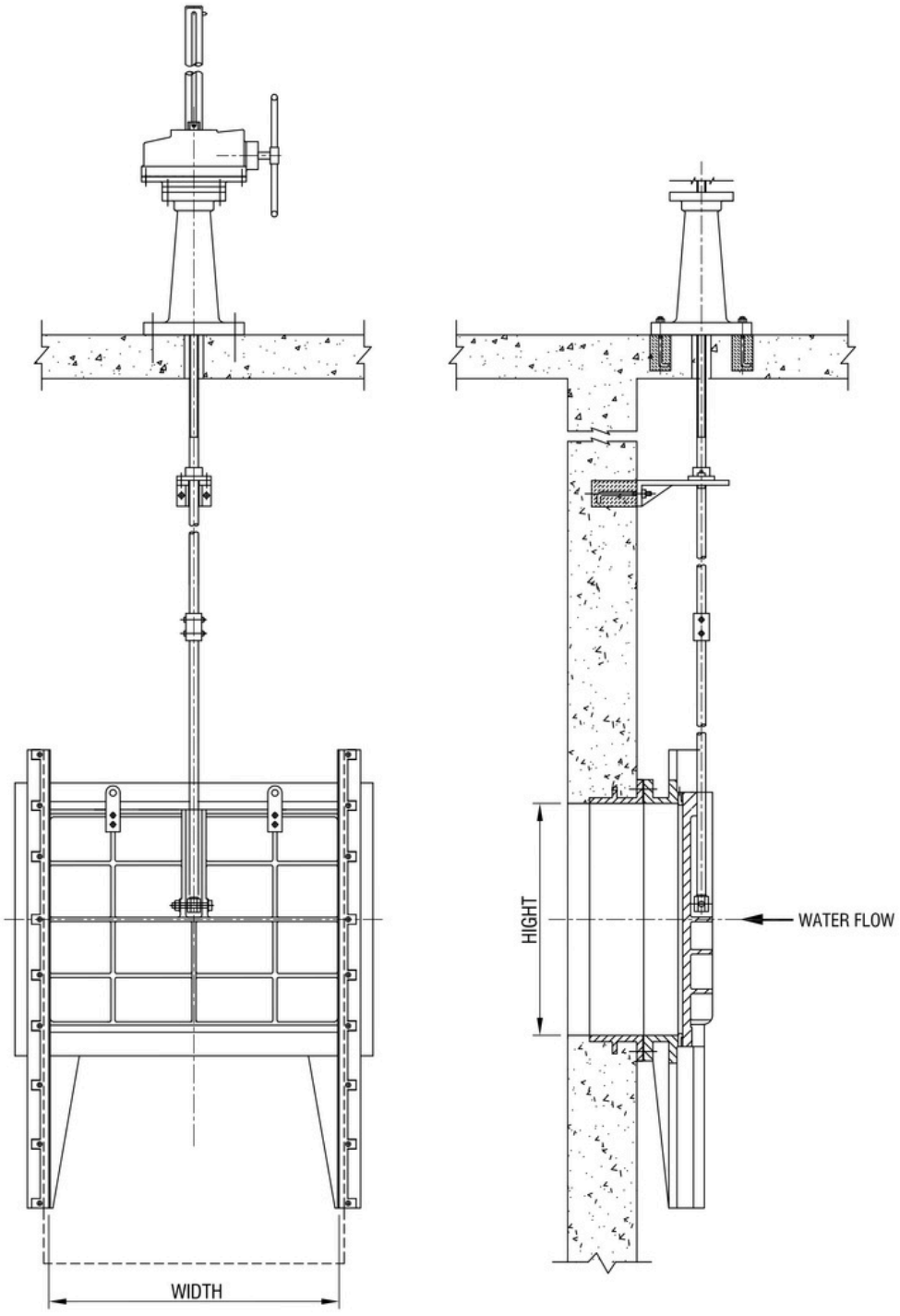
# WALL MOUNTED RISING SPINDLE SLUICE GATE : IS 3042 (WITH SPIGOT & FLASH BOTTOM SEAL)




THIMBLE MOUNTED SLUICE GATE (WITHOUT SPIGOT)




THIMBLE MOUNTED SLUICE GATE (WITH SPIGOT)




THIMBLE MOUNTED WEAR GATE

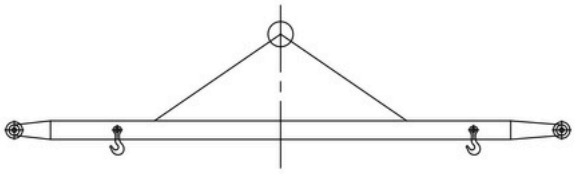
A stop log gate is a hydraulic control device used in wastewater treatment plants to regulate, isolate, or stop the flow of water within a channel or structure. It is a modular system composed of removable beams (logs) stacked horizontally within a frame, providing a versatile and cost-effective solution for flow control.

**Key Features:**

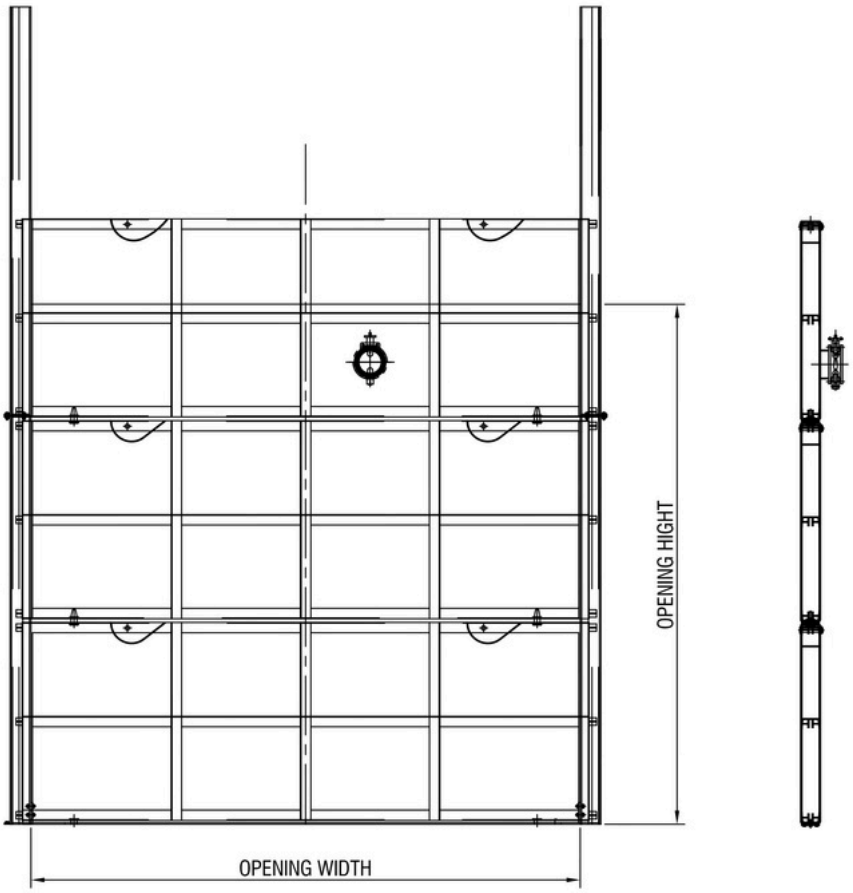
- Design:
- Made up of individual logs or beams, typically rectangular in shape.
- Constructed from materials like aluminum, stainless steel, or high-strength polymers.
- A vertical frame or guide rails hold the logs in place.
- Installation:
- Typically used in open channels or at inlet and outlet points of tanks and basins.
- Logs are stacked or removed manually or with lifting equipment to adjust the water level or stop the flow.

**Operation:**

- Logs are sealed with gaskets or rubber linings to minimize leakage.
- Depending on the application, they may be manually operated or integrated with lifting mechanisms.
- Applications:
- Flow Isolation:
- Used during maintenance, inspections, or emergencies to isolate sections of the treatment plant by blocking water flow.
- Water Level Control:
- Helps manage water levels in channels, reservoirs, or basins by adjusting the number of logs.
- Flood Control:
- Provides temporary barriers to manage overflow situations.
- Diversion:
- Directs water flow to alternative treatment units or bypass routes.



LIFTING BEAM




STOP LOG GATE WITH LIFTING BEAM

Durga Valves Pvt Limited
Ichapur Howrah

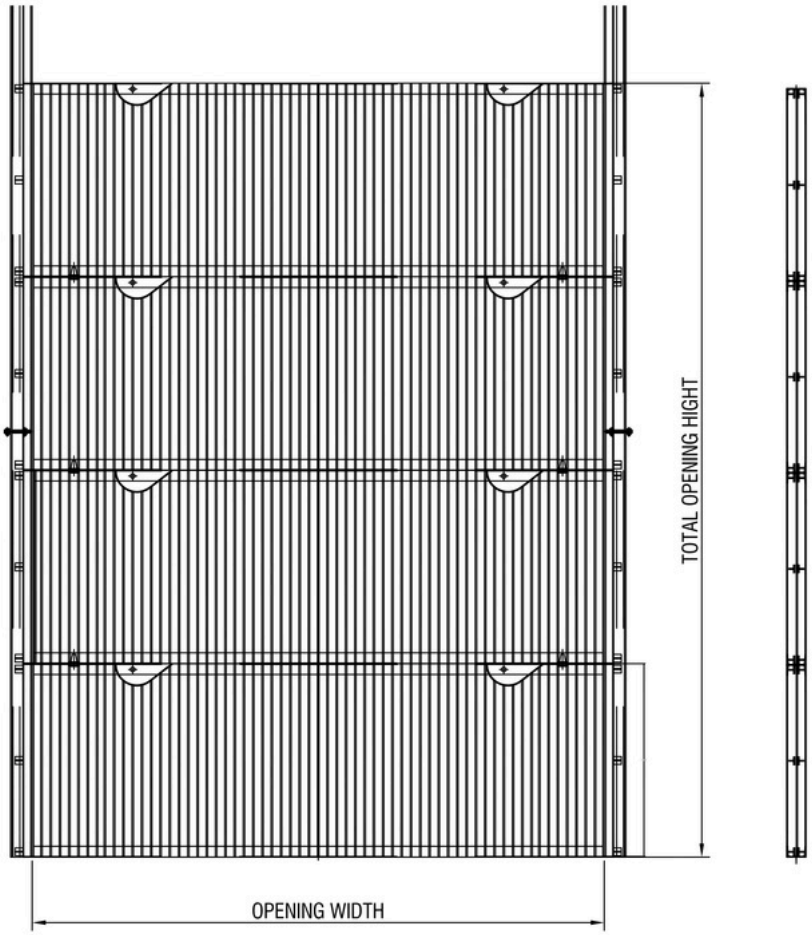
# TRASH RACK • SCREEN™

A trash rack screen is an essential component in wastewater treatment plants used to prevent large debris from entering the treatment process. It acts as the first line of defense in the screening stage, ensuring the protection of downstream equipment and maintaining the efficiency of the system. Here's an overview:

**Key Features:**

- Made up of vertical or angled bars, typically metallic.
- The bars are spaced at intervals to allow water flow while trapping larger objects such as sticks, leaves, plastics, and other solid waste.
- Position:
- Installed at the inlet or upstream section of a treatment plant, typically in a channel where wastewater enters.
- Material:
- Constructed from corrosion-resistant materials like stainless steel or galvanized metal to withstand harsh conditions.
- **Function:**
- Debris Removal: Blocks large solids that could damage pumps, clog pipes, or interfere with biological treatment processes.
- Mechanical Cleaning: Often equipped with a rake or cleaning mechanism to automatically remove collected debris, ensuring continuous operation.
- Types:
- Coarse Screens: Larger bar spacing, typically for catching large debris.
- Fine Screens: Smaller bar spacing for finer materials.
- Manual or Mechanical: Some trash racks are manually cleaned, while others are automated with a mechanical rake.
- **Advantages:**
- Prevents equipment damage and maintenance issues.
- Reduces operational costs by ensuring smooth flow through the system.

Improves overall plant efficiency by removing non-biodegradable waste early.




TRASH RACK

Durga Valves Pvt Limited
Ichapur Howrah

# Durga Valves Private Limited

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