PENSTOCK GATE – TECHNICAL DATASHEET

NOTE: The “Illustrative Images” stated in the offer details are added as indicative due to custom manufacturing and confidentiality.

The penstock gate is a sliding gate system used to control flow and water level in channels and pipelines. The operator raises or lowers the gate to adjust the discharge, isolate the line and perform maintenance safely.

TECHNICAL SPECIFICATIONS

Feature	Value / Description
Application	Flow and level control, line isolation and local shut-off during maintenance
Type	Wall-mounted, channel-mounted or flanged penstock gate
Material Options	304/316 Stainless Steel, hot-dip galvanized or epoxy-coated carbon steel
Sealing Elements	Single or double sided sealing with EPDM/NBR elastomer gaskets
Installation	Anchored to concrete walls or bolted to pipe flanges
Actuation	Manual handwheel, chain wheel, electric or pneumatic actuator
Design Pressure	Low and medium pressure ranges according to project data
Opening Size	Square, rectangular or circular openings sized for design flow
Seal Material	EPDM or other elastomers compatible with the process water
Design Basis	Manufactured according to relevant hydraulic and structural standards

OPERATING PRINCIPLE

Wastewater or clean water reaches the channel section where the penstock gate is installed. The operator moves the sliding gate up or down using the handwheel or actuator. As the

opening increases, the flow rate rises; when the gate closes, the flow is reduced or fully stopped.

ADVANTAGES

- Combines flow, level and isolation control in a single piece of equipment.
- Provides reliable sealing for safe shut-off of channels and pipelines.
- Robust stainless-steel construction offers long service life and low maintenance.
- Flexible manual or automated actuation options.
- Custom dimensions and mounting types to match each project layout.

APPLICATIONS

- Municipal and industrial wastewater treatment plants
- Pump stations and lifting structures
- Irrigation canals and regulator structures
- Balancing tanks and bypass lines
- Dams, reservoirs and intake structures