

Ductile Iron/ Cast Iron Penstocks



Description

Frames and Gates

Materials are in high duty cast iron constructed with substantial ribbing for resistance to deflection. Frames connection are of flat back or spigot type for extending into concrete, spigot end type provide extra stiffening to the frame. As for circular and rectangular penstocks, flanges connection are also available on request, These types of connection are used to enable bolting installation to flange inlet pipe and wall thimble installation. On each side of the frame, guide channels are provided for the gate and extended to a sufficient height to ensure that the gate is supported over not less than two thirds of its depth when at maximum lift.

Body Seat, Gate Seat

These consist normally of bronze seating strips of heavy rectangular sections pinned to machined surfaces on body and gate which are then ground in together to a watertight bearing. Bronze strips are also fitted as bearing surfaces in the guides into which the gate lifts. For sea-water or sewage, aluminium bronze is used or alternatively is stainless steel.

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Salient Features

- ✓ Materials: Cast Iron or Ductile iron
- ✓ Application: – Sewage Treatment Plants, Power Plants, Flood Control Projects, Dams, Industrial water control projects
- ✓ Configuration: 4-sides sealing, 3-sides sealing, Special profile, Roller gates
- ✓ Standards: AWWAC-501, BS 7775
- ✓ GATE OPENINGS: Three types of opening are available
 - ☐ Square
 - ☐ Rectangular
 - ☐ Circular
- ✓ Metal to metal sealing
- ✓ Mounting: Channel, wall mounting, flush bottom
- ✓ Thrust tubes: Needed
- ✓ Water pressure & Duty: These penstocks can be designed against any water pressure or metric water column (MWC). Depending on the capacity to withstand varies water pressure, the penstocks are also classified as Light duty, medium duty or heavy duty.
- ✓ Replaceable seals leading to low maintenance.
- ✓ Type: Rising & Non-rising spindle.
- ✓ Operation: Manual, Gearbox, Electric & hydraulic actuation