# WLF PENSTOCKS

AWMA's WLF Penstock range consists of a sluice type top sealing penstock featuring a wedge lock seal, designed for high head applications.

## **FEATURES & BENEFITS**

- Resilient seals around all four sides of the aperture.
- A unique design applies a positive seal pressure as the gate fully closes providing excellent sealing under high head pressures.
- Bi-directional sealing.
- Single and dual spindle configurations available.
- Both rising and non-rising spindle configurations available.
- Custom designed and fabricated to suit any size or shaped orifice.

## **APPLICATIONS**

- Full perimeter sealing accommodates high head pressures for excellent sealing performance across all applications.
- Isolation of flow under high head applications.
- Suitable in corrosive environments.
- Excellent for Dam Isolation





## WLF PENSTOCKS

#### **DESIGN**

#### **DESIGN SUPPORT**

 AWMA's R&D and Engineering teams are available under Early Contractor Involvement (ECI), to assist in developing water control and screening solutions for bespoke green-field and brown-field sites.

#### SIZES

- All AWMA water control gates are custom sized to ensure they meet specific site and operational requirements.
- · Customisation reduces installation costs.

#### MATERIALS

- AWMA select materials to meet a minimum design life of 25 years.
   Where required, AWMA can offer higher grade materials, coatings and protection systems to extend the design life to 100+ years.
- AWMA use ultra high molecular weight polyethylene (UHMWPE) for penstock door guides and/or wedges to provide maintenance free bearing surfaces.
- Plasticised PVC or EPDM are used for the manufacture of seals. These
  materials offer superior endurance in wastewater and freshwater
  applications.
- Materials used for penstock door and frames include marine grade aluminium and grades 304, 316, 2205 and 2507 stainless steel.
- Alternative material options are available to suit the application and/ or environment specific requirements.
- Materials used in the construction of the WLF Penstock range have a high corrosion resistance and can be operated for many years with minimal maintenance.

#### SEALING

• The sealing ability of this gate meets the 'Australian Technical Specification for Fabricated Water Control Infrastructure'.

#### MAINTENANCE

- The WLF Penstock range has a minimum 25 year design life.
- . Minimal maintenance is required offering low 'whole of life costs'.
- If required, all the wearing components can be changed, with ease, on site. The WLF Penstock has specifically been designed with the seals mounted on the gate leaf, rather than the frame, for ease of maintenance.

#### **MANUFACTURE**

#### QUALITY

- All AWMA products meet relevant Australian and international standards.
- · All stainless steel welding is continuous to avoid crevice corrosion.
- AWMA hold international accreditations for ISO 9001; Quality, ISO 14001; Environment and ISO 45001 OH&S management.
- AWMA's Integrated Management System aims to provide a framework to deliver products and services that consistently exceed customer expectations.

### **INSTALLATION**

#### MOUNTING OPTIONS

- · Typically wall mounted.
- The WLF Penstocks are ideal for pit installations.

#### **ACTUATION SYSTEMS**

- · Choose from
  - Rising Spindle,
  - Non-Rising Spindle or
  - AWMA's Rising/Non-Rising Spindle Arrangement
- Handwheel, electric, hydraulic or pneumatic actuator.
- Portable actuation systems available.

#### OPERATION SYSTEMS

- Integration into new or existing SCADA systems optional.
- Global, web based operating platforms for remote control and monitoring.

#### COMMISSIONING

#### DOCUMENTATION AND TRAINING

- Detailed documentation on operation, testing procedures and maintenance will be provided with all AWMA water control solutions.
- Comprehensive on and/or off site training available.







