

# LAYFLAT GATES

AWMA's LayFlat (Tilting Weir) Gate range incorporates downwards opening tilt gates for accurate regulation and isolation of flows.

## FEATURES & BENEFITS

- The design includes a gate leaf that is hinged across the bottom and actuated via a cable hoist mechanism.
- Single bay and multi-bay designs available.
- The LayFlat Gate range has a dedicated volumetric flow algorithm available that has been independently certified.
- The modular design allows for the actuation system to be self contained or separately mounted.
- Accurate overshoot flow and level control.
- Integrated emergency bulkhead guides.
- Suits structure openings of all sizes and are custom sized to suit their required application.



## APPLICATIONS

- The LayFlat Gate range is utilised for applications across all industry sectors.
- To date, AWMA has manufactured Australia's largest tilting LayFlat Gates required to regulate environmental flows.
- Proven to accurately regulate irrigation, environmental and storm water flows.
- Fish-friendly, suitable for environmental applications.

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Water Control Solutions

[www.awmawatercontrol.com.au](http://www.awmawatercontrol.com.au)



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## 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 Bulkhead 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 LayFlat 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.

## MANUFACTURE

### QUALITY

- All AWMA products meet relevant Australian and international standards.
- All fabrication is in accordance with the 'Australian Technical Specification for Fabricated Water Control Infrastructure'.
- 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

- The LayFlat Gates can be mounted to the upstream or downstream side of new or existing structures to maintain 100% of the original open waterway.
- Alternatively they can be mounted inside the structures.
- Options include:
  - Upstream slab mount; self contained actuation
  - In structure mount; separately mounted actuation
  - In structure mount; separately mounted raised actuation.

### ACTUATION SYSTEMS

- 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.