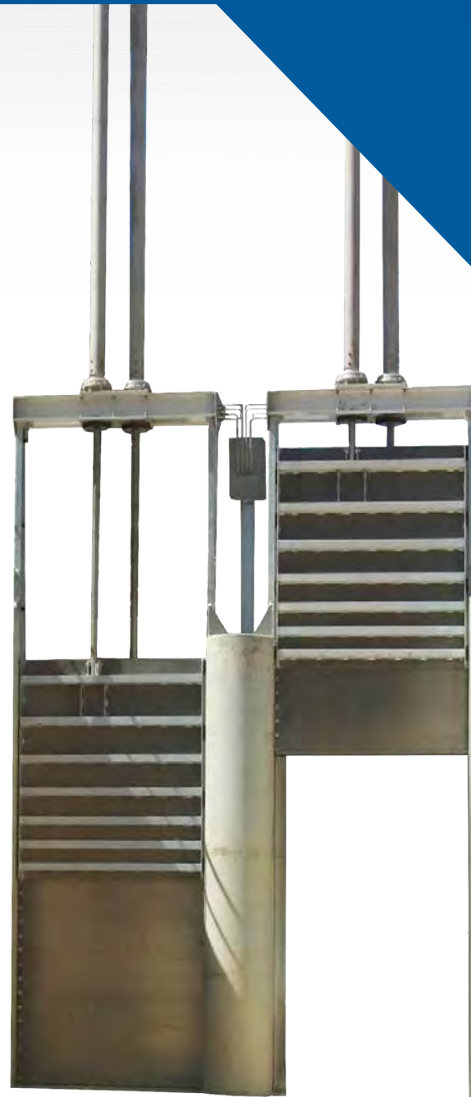


# COMBINATION GATES

AWMA's Combination Gate range is a dual leaf gate design consisting of overshoot and undershot gates in the one frame.

## FEATURES & BENEFITS

- Combination Gates allow many options for overshoot and undershot flow regulation and control, within a single gate structure.
- Regulate flows and water levels with the upper gate leaf.
- Set flow rate or fully drain the upstream pool with the lower gate leaf.
- Lift both gate leaves completely out of the water way to allow for unobstructed flow.
- Custom designed to meet flow regulation, operation and site requirements.
- Suitable for single and multi-bay sites.
- Uni-directional sealing as standard.
- Both rising and non-rising spindle configurations available.
- Accurate overshoot and undershot flow and level control.
- Custom designed and fabricated to suit any size or shaped orifice.



## APPLICATIONS

- The Combination Gate range is utilised for applications across all industry sectors.
- Multiple regulation and isolation options for medium-large applications.



# COMBINATION GATES

## 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 gates and frames include marine grade aluminium and grades 304, 316, 2205 and 2507 stainless steel.
- Materials used in the construction of the Combination Gate 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 Combination Gate 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'.
- 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

- Combination Gates are typically wall mounted.
- The side frames can be face mounted or embedded.
- The sill is available in a raised or flat sill configuration.

### ACTUATION SYSTEMS

- Handwheel, electric, hydraulic or pneumatic actuator.
- Portable actuation systems available.

### OPERATION SYSTEMS

- Integration into new or existing SCADA systems optional.
- Global, web bas

## 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.

