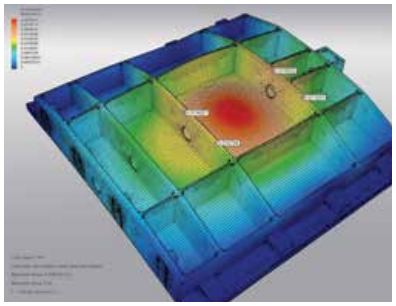
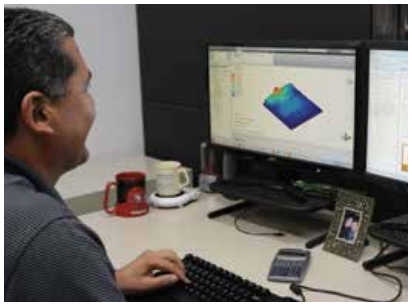
Waterman

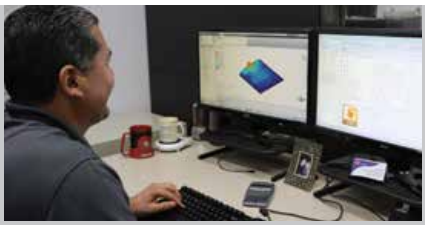
ENGINEERED WATER CONTROL PRODUCTS

PRODUCTS AT-A-GLANCE




WATER AND WASTEWATER TREATMENT / HYDROPOWER/DAMS / INDUSTRIAL / DRAINAGE/FLOOD CONTROL / IRRIGATION



ENGINEERING LEADERSHIP

The experts at Waterman have custom-engineered thousands of flow control gates and valves for projects throughout the world. Waterman's team excels at developing innovative solutions to specific project needs, partnering with government agencies, utilities, contractors, consulting engineers and plant managers. Our commitment to a highly-trained, customer-focused engineering team is unmatched by our competitors. Using computer-modeling technology and Finite Element Analysis, Waterman has systematically improved all of its key products so they offer a higher level of performance.

QUALITY CONSTRUCTION AT EVERY STEP

Waterman has one of the industry's largest manufacturing operations where we fabricate, machine and test our water control products. Led by managers trained in the latest quality systems, we carefully monitor all of our processes to ensure quality at each step of design and construction.

FABRICATED SLUICE/SLIDE GATES–*250 SERIES*

Best-in-class fabricated water control gates provide reliable performance for water, wastewater and hydropower applications. They're noted for their excellent sealing/leak resistance and for their long service life. Each gate is custom-designed to your project requirements.

- SS Models: Stainless steel construction for maximum corrosion resistance (304, 316 or 2205 stainless available).
- A Models: Aluminum construction.
- UHMWPE continually-self-adjusting seal system offers leakage rates better than the AWWA C561 /C562 spec. Tested for 100,000 cycles (4x leading competitor) and continued to outperform the leakage specification.
- Patented Guardian® seal system helps seal corners from leakage and dramatically increases seal life for both top and flush bottom seals. (U.S. Patent # 8,820,711 awarded August 2014)
- Mounting Flexibility: In-Channel, End-of-Channel or Submerged Opening. Optional lower-to-open weir gates for decant and level control.
- Manual, electric or hydraulic actuation.

HEAVY-DUTY CAST IRON SLUICE GATES

Waterman Cast Sluice Gates are used in applications where safety and reliable performance are essential (dams, tidal environments, water treatment plants) and where outstanding product longevity is desired. Waterman cast gates are preferred for high-head (up to 200') and high debris (water treatment) environments as well as for critical gateways in treatment plants. Each gate is custom-built to your requirements.

- Cast iron and ductile iron alloys available, including 3% Ni or Ni-Resist for corrosive environments.
- Each gate designed with Finite Element Analysis. Stress, and deflection are measured based on both seating and unseating heads and other external loading. Analysis allows gate to perform with maximum reliability and minimum leakage.
- Q-Seal bottom seal for high-debris environments.
- High performance dual-bolt adjustable wedge system.
- Manual, electric, or hydraulic actuation.
- Machined metallic seats or optional resilient gliding seal.

RADIAL (TAINTER) GATES

Waterman radial gates control water flow over a dam or drainage structure, providing a wide and unobstructed opening. The typical large profile of these gates requires rugged design and construction incorporating state of the art engineering methods for reliable operation with minimal maintenance. Critical gate components are designed with Finite Element Analysis to measure stress and deflection. Each gate is custom-designed to your requirements.

- Steel or stainless steel construction.
- Key components field-adjustable for in-field installation flexibility.
- Serviceable resilient sealing surfaces.
- Manual, electric or hydraulic actuation.

FABRICATED BUTTERFLY VALVES

Waterman fabricated butterfly gates / valves allow water control in restricted spaces that prohibit use of a traditional gate. They are also widely specified in applications where a drip-tight seal is required.

- Maximum waterway opening design, ¼ turn operation, permits flow-regulation and modulation.
- Zero leakage at rated pressures.
- Exclusive stainless steel machined sealing surface provides close tolerance, corrosion resistance and long life.
- High-performance double-lipped seal and large field-adjustable mating seat offer superior performance. All seals designed to be field-serviceable allowing simplified maintenance.
- Manual, electric or hydraulic actuation.

AUTOMATIC LEVEL CONTROL GATES

With over 30 years experience and the largest worldwide installed base, Waterman stands apart as the leading provider of automatic level control gates. Using a proven, proprietary design, Waterman's level control gates automatically maintain a specified water level. They operate without any outside power or motor, free of any manual intervention, irrespective of the volume of incoming flow, and independently of the level on the other side. Common applications include canals, lakes and reservoirs, flood control, wastewater treatment, and hydropower.

- Broadest selection of sizes, models and options for every application.
- Proven, proprietary design with thousands of applications.
- Largest in-house design and fabrication capability.

LIFTS AND CONTROLS

Manual – Handwheel and Gear Types

Easy to operate, reliable performance.

Portable Power Actuators

Fast operation of multiple gates. Electric, gas and hydraulic.

Automation

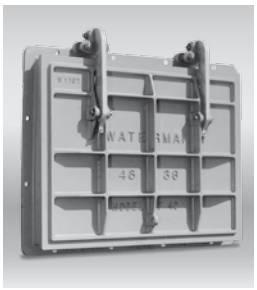
Integration with popular actuators, electric or hydraulic.

Motor options include Auma, Biffy, EIM, Limitorque, Rotork and others.

WATERMAN OFFERS THE BROADEST SELECTION OF GATES AND CONTROLS FOR SPECIALTY APPLICATIONS

Stop Logs/Bulkhead Gates

- Open-channel flow or level control
- Resilient seals for low leakage requirements
- Aluminum, carbon, or stainless steel construction
- Custom designed to meet application needs



Heavy Duty Drainage (Flap) Gates

- Pump and gravity discharge, backflow protection
- Cast or fabricated construction
- Custom designed to meet application needs

Automatic Siphons

- Used to remove excess inflow from basins, streams and canals, preventing overflow and flooding
- Requires 50 times less space and dramatically less civil structure compared to an overflow weir of the same capacity

Self-Regulating Tide Gates

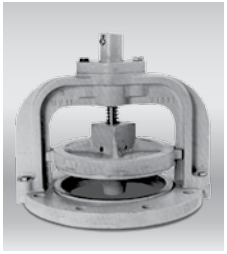
- Used in tidal wetlands preservation and restoration
- Restores tidal flushing of marshes without flooding of upland property behind dikes and levees
- Protects flood-prone areas
- Controls mosquito larvae

Overshot/Tilting Weir Gates

- Allows upstream water control to a tight tolerance
- Inherently safe, allows surge flows and debris to pass over

Telescoping Valves/ Decanting Valves

- Control level of liquid or effluent in basins
- Options add precision to increased or reduced flow adjustments

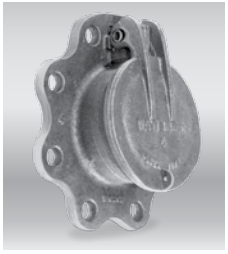


Mud Valves

- Used to aid in sediment flushing from basins and lines

Canal Gates

- For drainage and irrigation canals
- Cast iron, aluminum or stainless steel



Hydrostatic Pressure Relief Valves

- Wall or floor mounted, reliable design

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