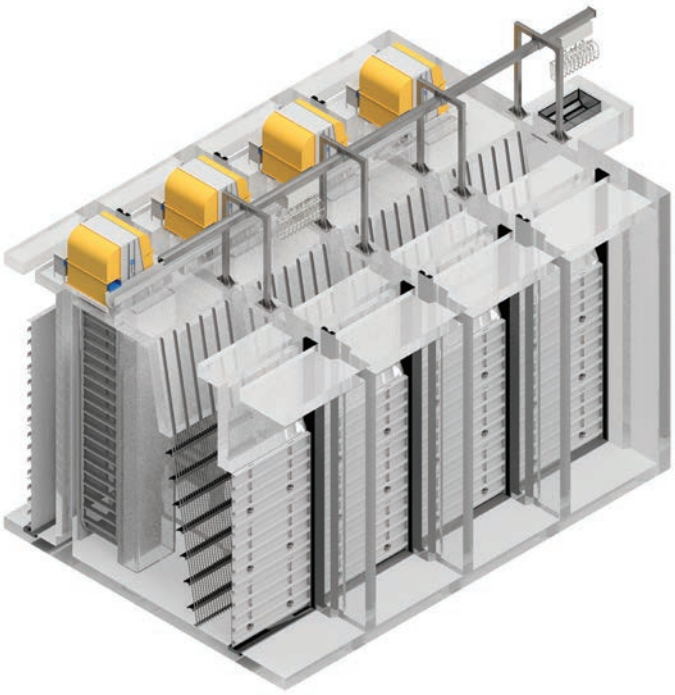
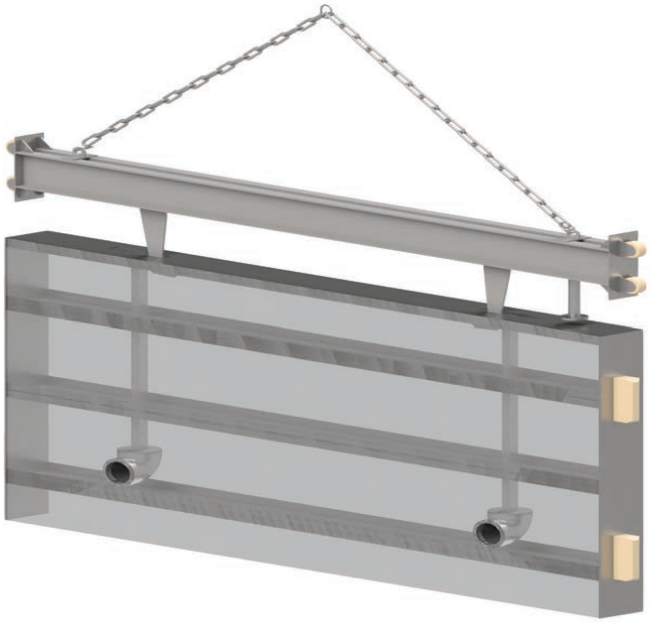
WTR® Stop Gates and Lifting Beams

Intake Dewatering and Maintenance





WTR® WATER SCREENING SOLUTIONS

Stop Gates and Lifting Beams

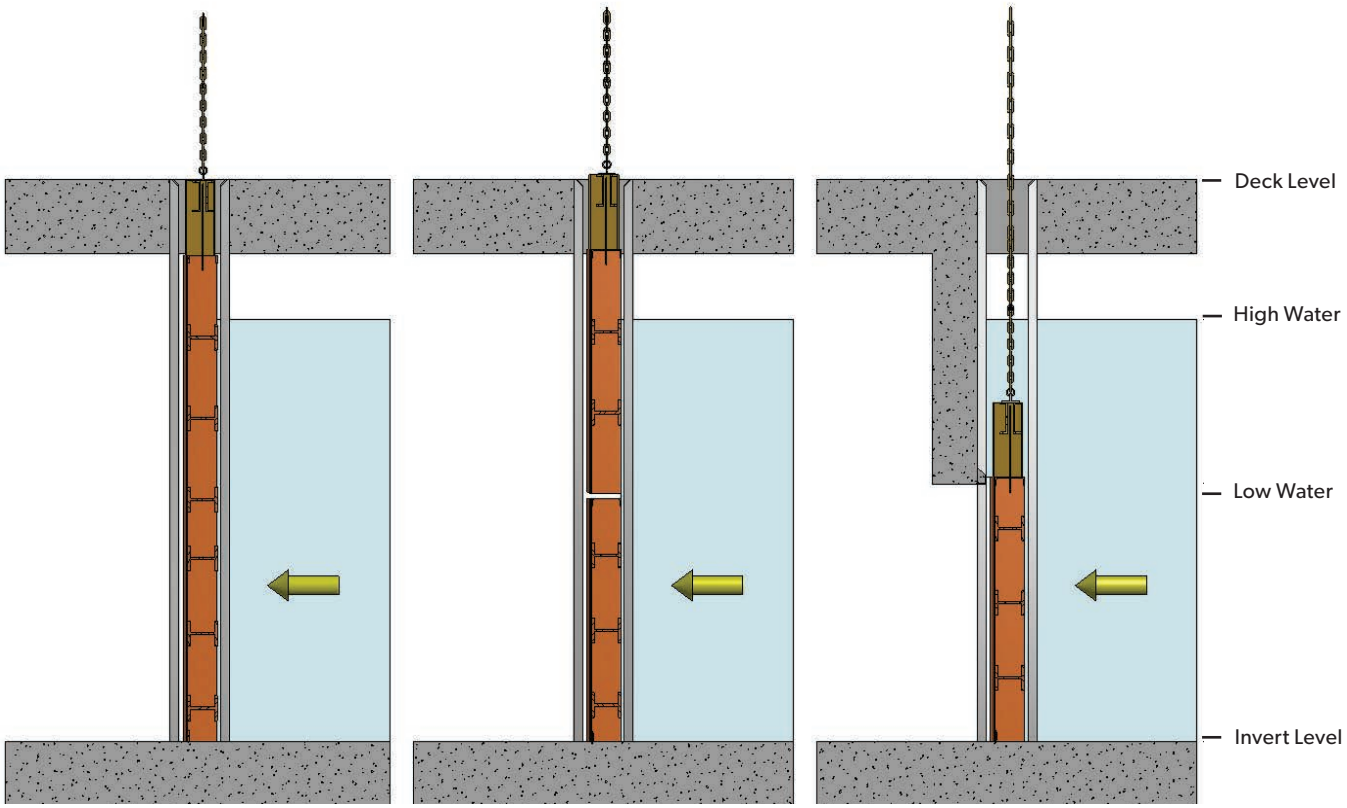
WTR's Stop Gates and Lifting Beams are an essential component to support dewatering of intake structures for maintenance, inspection or isolation. Stop Gates, (AKA Stop Logs), are used in all types of applications where maintenance under dry conditions is required, inspection of the structure is necessary or a flow stream needs to be isolated. Applications include power plant raw water intakes (fossil and nuclear), industrial raw water, potable drinking water, irrigation and numerous other types of plants.

Unlike Sluice or Slide Gates, Stop Gates are unique. In lieu of being "fixed" and subjected to constant submergence and corrosion, (common with Sluice and Slide Gates), Stop Gates are stored above the water. Since most raw water intakes do not require frequent dewatering, Stop Gates are utilized only when required.

WTR Stop Gates are designed to provide superior sealing of intakes via a dedicated guide location and installation process. Our multi stage guide embedment process during construction of the intake assures proper fit and mating of the gates with the guides. Gates are installed with the water balanced on either side. When dewatering of the intake begins, the "on-seating head" will create a tight seal providing minimal or no leakage.

WTR Stop Gates are also designed to work in conjunction with a dedicated Lifting Beam, which allows for controlled engagement and disengagement of gate sections. This eliminates the need for divers in the water to connect and disconnect gate sections during insertion or removal. When inserted in the guide slot, the bias of the Lifting Beam will not allow disengagement of a gate section until properly seated, as confirmed by a sensing rod. When placed in the opposite bias, the Lifting Beam will engage with the upper most gate section for extraction.

Stop Gates can be supplied in single piece / full height configurations, multiple sections to reduce overhead lifting height or apron wall design to minimize gate height and quantity. Other options include balancing valves, dual direction guides, access ladders and above or below deck storage racks.



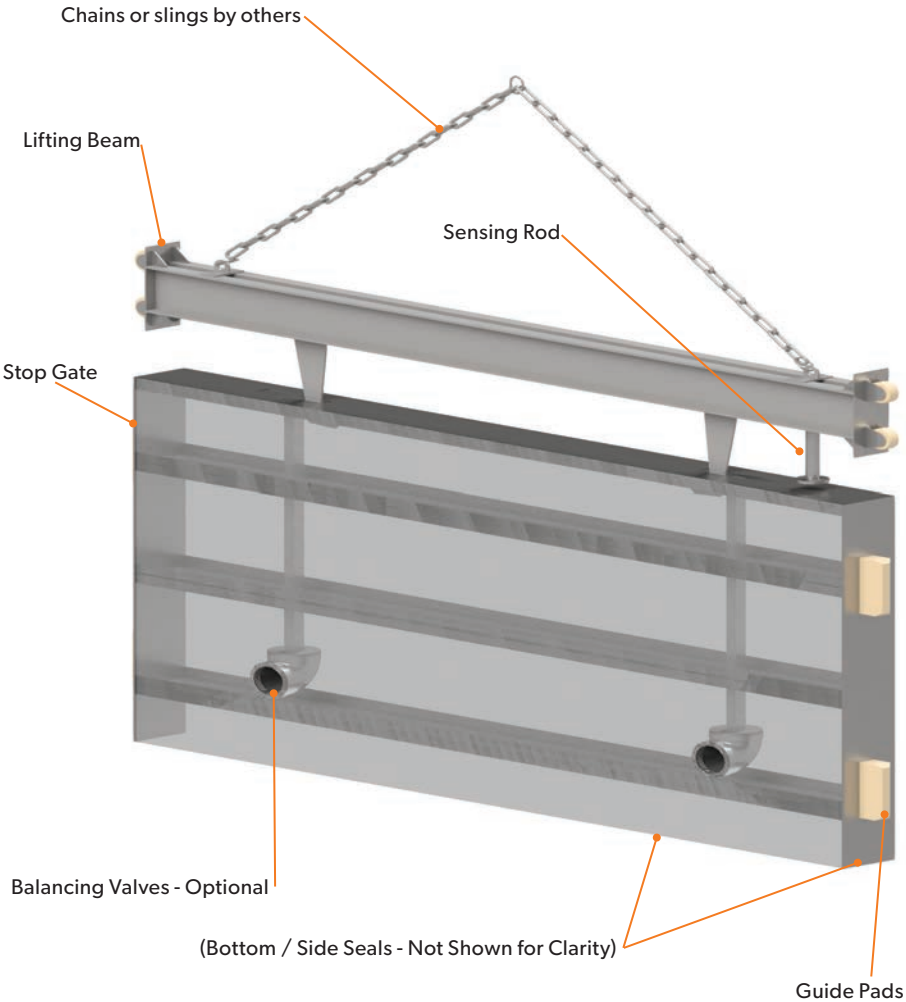
Stop Gate Optional Arrangements

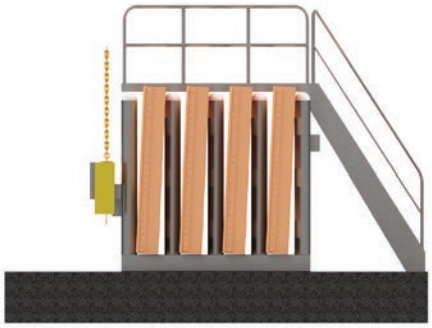
Features:

- Stop Gates are built to site specific conditions, typically from 3ft. (1m) to 20ft. (6m) wide.
- Gates are normally supplied in Epoxy Coated Carbon Steel. Options for alternate materials are available.
- Each gate includes guidance rollers to prevent binding during insertion or removal under balanced water levels.
- Gates include side and bottom seals of high durometer neoprene for positive sealing.
- Designed for "on-seating head" to create an increasingly tighter seal to prevent leakage.
- Guides located in a dedicated slot, installed in a multi stage process to assure positive fit with Stop Gates.
- Guides are available in 316L SS, Duplex or Super Duplex and should be included in the intake cathodic protection system.
- Gate Lifting Beam accommodates submerged engagement and disengagement from gate sections.
- Lifting Beam operates in conjunction with sensing rod on gate to confirm seating prior to Lifting Beam disengagement.
- Lifting Beams are normally supplied in epoxy coated carbon steel. Options for alternate materials are available.

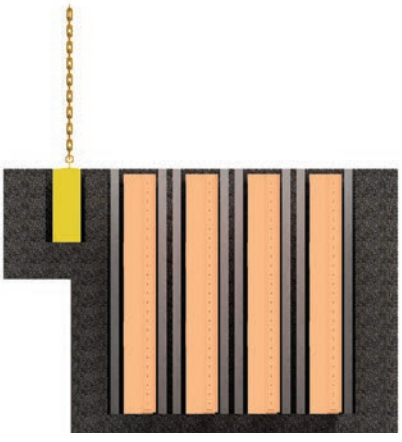
Options

- Single piece / full height gates.
- Multiple section gates to reduce required lifting height.
- Apron wall design to minimize overall gate height and quantity of gates.
- Balancing valves to allow for gravity refilling of intake.
- Dual direction guides to accommodate sealing in either direction by reversing the gate.
- Built in access ladders to allow for descending into the intake.
- Storage racks located above the deck with access ladder or below the deck within a sump.





Above Deck Storage



Below Deck Storage

Stop Gate Sizing Data

(please complete for each channel width)

Plant / Site Name _____

Site Location _____ (City, State, Country)

Construction ☐ New ☐ Existing ☐ New Expansion ☐ Hazardous Area

Water Source ☐ Fresh ☐ Brackish ☐ Sea ☐ Closed Cycle

Number of Channels _____ ☐ Indoor ☐ Outdoor ☐ Covered Area

Flow Rate per Channel _____ GPM _____ M^3/sec _____ MGD

Channel Width (each) _____ Feet _____ Meters

Deck Elevation or Depth _____ Feet _____ Meters

Hi Water Elev. or Depth _____ Feet _____ Meters

Low Water Elev. or Depth _____ Feet _____ Meters

Invert / Bottom Elev. _____ Feet _____ Meters

Desired Arrangement ☐ One Piece ☐ Full Height Sec. ☐ Apron Wall Sec.

Desired Options ☐ Balancing Valves ☐ Dual Direction Guides ☐ Access Ladders

Desired Storage Rack ☐ Yes ☐ Above Deck ☐ Below Deck

Desired Guide Materials ☐ 316L SS ☐ Duplex SS ☐ Super Duplex ☐ Other _____

Desired Lift Beam Materials ☐ CS Coated ☐ 316L SS ☐ Duplex SS ☐ Other _____

Special Options _____

CONTACT DETAILS _____

Company Name _____

Contact Person Name _____

Email and Phone Number _____

WTR® WATER SCREENING SOLUTIONS

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