STOP LOGS

Waterman Stop Logs manufactured from steel, stainless steel and aluminum can be specified for use to control flows in waste water and sewage treatment plants, pumping stations, irrigation canals and power plants intakes. A resilient seal along the bottom of each log seals on either the sill plate or top of another log. Side seals are generally incorporated into the logs to provide for low leakage requirements.

Guides are normally mounted with anchor bolts in a blockout but can be designed for embedment in the concrete. Stop Logs are placed and removed by a log lifting device and client's overhead crane or mobile crane on larger sizes. The lifting device can be operated from the deck of the structure. The stop logs must be lowered and lifted under water balanced condition.

Waterman of Egypt has supplied stop logs along with their guides for controlling channels of up to 15 meters deep in petrochemical and power plants in the Middle East.
GENERAL
The stop log shall be fabricated in several sections. The stop log frame shall consist of side guide rails and sill plate. The side guides shall extend from the channel invert to the top of wall elevation. A log lifting device shall be supplied to lower and lift the logs.

STOP LOG FRAME (GUIDE RAILS AND SILL PLATE)
The guide rails and sill plate shall be fabricated from either stainless steel, aluminum or painted mild steel as indicated in the contract specifications. The guide rails shall be U section and shall have full length equals to the channel height. The guide rails and the sill plate shall constitute a complete frame. The frame must be supported to the concrete structure by anchorage system as indicated on Waterman submittal drawings.

STOP LOG
The stop log shall be manufactured in several sections. The stop log leaf shall be a plate reinforced with structural shapes welded to the plate. The log shall not deflect more than 1/360 of the stop log nominal width under maximum head. The stop log top plate shall be provided with two openings to act as click-in device to grip the lifter hook for lowering and lifting the log. The log shall have bearing strips at both sides and back made of UHMW Polyethylene to act as a bearing surface to help the log slide into the frame.

STOP LOG LIFTER
A lifter shall be supplied to lower and lift the logs. The lifter shall be of sufficient weight that it will positively engage the log when lowered into the stop log frame. The lifter shall include two hooks one at each end. Unlatching of the stop logs shall be easily accomplished by personnel on the operating floor with the use of a lanyard. The lifter shall be equipped with special arrangements to be capable of being attached to the client’s crane. One lifter shall be provided for each stop log width.

SEALS
Bottom seals: A resilient seal along the stop log bottom shall be incorporated on each log. The seal shall be of the lip type seal with minimum seating surface of 25mm to 50mm on larger logs. Side seals: rubber seal along each side of the log face plate shall be attached to the log. For application that may have flow in both directions, double seals are available.

MATERIALS
Stop Log and Frame
- Stainless Steel - ASTM A-240/A-276, Type 304 or 316, as specified
- Aluminum - ASTM B-209 Alloy 6061-T6
- Mild Steel - ASTM A-36 or DIN 17100 St. 37-2

Fasteners
- Stainless Steel - ASTM F-593 and F-594 Type 304 or 316, as specified

Seals
- Neoprene Rubber - ASTM D-2000

Bearing Strips
- UHMW PE - Ultra High Molecular Weight Polyethylene

Finish
- Mill finish on all stainless steel and aluminum surfaces
- Epoxy paint for mild steel surfaces