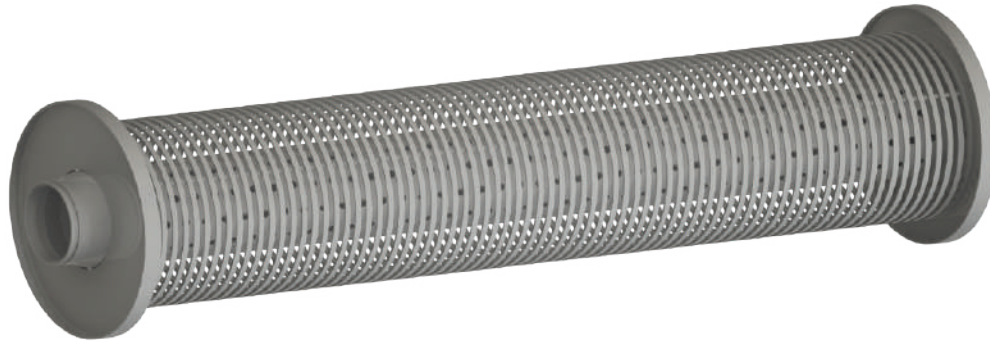


## 1700 SERIES STATIC FISH SCREENS



### INTRODUCTION

The Morrill Industries, Inc. 1700 Series Static Fish Screen is a 304/304L Stainless Steel/Wedge Wire passive type fish screen. Passive Screens are used in applications in which Active or self-cleaning screens cannot be utilized, reference Section 11.10.1.3 of the National Marine Fisheries Service, Anadromous Salmonid Passage Facility Design criteria.

11.10.1.3 Passive Screens: A passive screen should only be used when all the following criteria are met:

- The site is not suitable for an active screen, due to adverse site conditions
- Uniform approach velocity conditions must exist at the screen face, as demonstrated by laboratory analysis or field verification
- The debris load must be low
- The combined rate of flow at the diversion site must be less than 3 cfs
- Sufficient ambient river velocity must exist to carry debris away from the screen face
- A maintenance program must be approved by NMFS and implemented by the water user
- The screen must be frequently inspected with debris accumulations removed, as site conditions dictate
- Sufficient stream depth must exist at the screen site to provide for a water column of at least one screen radius around the screen face
- The screen must be designed to allow easy removal for maintenance, and to protect from flooding

### OPERATION

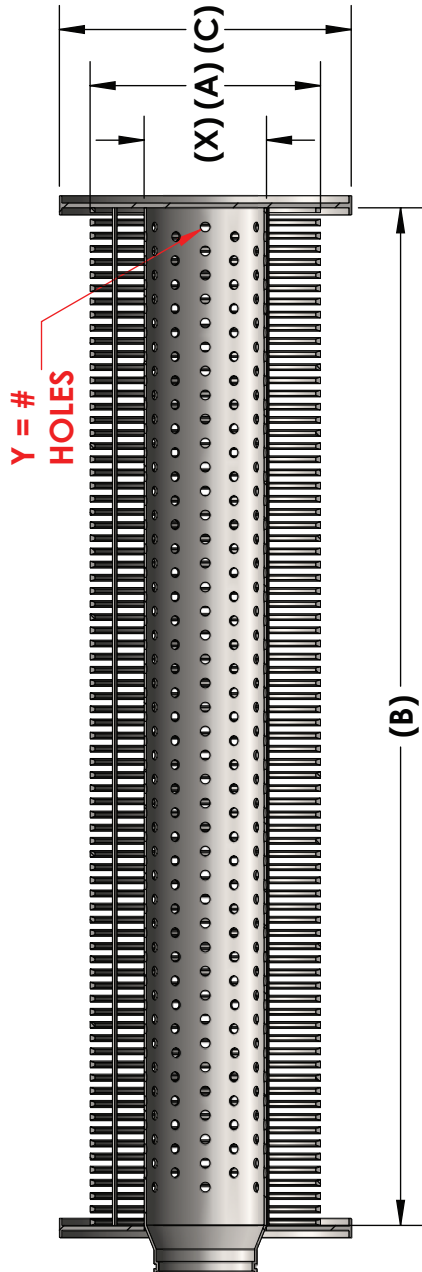
The 1700 Series Static Fish Screens are designed to be on the suction or intake side of a pumping system. They can be utilized in any body of water that contains fish or wildlife that may be adversely affected / mortally injured by the mechanical intake of water. Water is suctioned through the wedge wire screen and a balance tube at pre-determined, qualifying flow rate. Stand off rings help to prevent loss of screen area when the units are resting on the bottom of a body of water. The passive nature of the screen allows for no mechanical moving parts.

### FILTER CONSTRUCTION

- Johnson Wedge Wire Screen (304/304L Stainless Steel)
  - 0.068" Slot Size
  - 0.071" Wire Width
  - 48.9% Open Area
- Balance Tube (14 gauge 304/304L Stainless Steel)
  - 304/304L Stainless Steel ASTM A240
- Stand Off Rings (304/304L Stainless Steel)
- Connections available
- Groove
- Flange
- Plain End

**\*STATIC SCREENS ARE A NON-STOCKING ITEM, AND ARE BUILT PROJECT SPECIFIC.  
CALL US FOR ORDERING DETAILS.**

## SPECIFICATIONS



MODEL #	SCREEN DATA				CONNECTION SIZES (FOR GROOVES)						APPROACH VELOCITY (GPM FLOW RATE @ GIVEN FPS)			SLOT VELOCITY		BALANCE TUBE			LBS.	
	A	B	C	AREA	4"	6"	8"	10"	12"	14"	16"	0.1000	0.083	0.0500	.5 FT/SEC (CFS)	GPM	X	Y		MAX GPM @ 2.75 FPS
1712-0185	12.8	18	19.3	5.00	X							225	185	112	1.26	552	6.63	24	185	51
1712-0375	12.8	36	19.3	10.00	X	X						450	375	225	2.52	1095	6.63	48	375	103
1712-0500	12.8	48	19.3	13.34	X	X	X					600	500	300	3.26	1463	8.63	64	500	135
1712-0750	12.8	72	19.3	20.00	X	X	X	X				900	750	450	4.89	2194	8.63	96	750	210
1716-1500	16.00	120	22.5	41.80			X	X	X			1875	1550	925	10.30	4635	12.75	192	1500	450
1724-2000	24.00	106	30.5	55.50			X	X	X	X		2490	2050	1245	13.60	6102	16.00	275	2050	570
1724-2300	24.00	120	30.5	62.80			X	X	X	X	X	2800	2325	1400	15.30	6866	16.00	275	1500	630
1730-3400	30.00	144	36.5	93.40			X	X	X	X	X	4150	3400	2075	227.00	10200	18.00	398	3400	916