

# **Intake Screens**

## **Achieving Efficient Filtration Of Water Impurities**

Intake screens are typically installed at the inlet point of a pumping system and are designed to protect pumps and other equipment from debris, contaminants in the lakes or water bodies, and to prevent aquatic animals from entering the pipeline.

The intake screen primarily uses wedge wire as the filter screen. The continuous smooth V-shaped wedge wire ensures its open area and filtration effect. It also has self-cleaning and backwashing capabilities to reduce the risk of clogging, significantly improve maintenance efficiency and minimize the need for maintenance.

Based on the water flow rate and applications, we offer T intake screens, half-barrel intake screens, I type intake screens, drum type intake screens and small pipe type intake screens.



#### **Technical Information**

The dimensions of our products can be customized according to the design and purchasing needs of our customers.

• Material	stainless steel and duplex stainless steel		
• Slot size	0.1/0.15/0.2/0.25/0.3 and up to 6.0 mm.		
• Diameter	25 mm to 1500 mm		
• Wedge wire sizes	Width: 1.5/1.8/2.3/3.0/3.3/3.7 mm	Height: 2.2/2.5/2.7/3.6/4.3/4.7/5.6/6.3/7.0 mm	
• Support rod sizes	Width: 2.3/3.0/3.3/3.7 mm	Height: 2.7/3.6/4.7/5.6/6.3 mm	

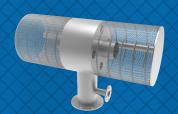
#### **Common Specifications of Passive Intake Screens**

Туре	Capacity MGD (liters/ sec.)	Screen Diameter inch (mm)	Overall Length inch (mm)	Outlet Diameter inch (mm)
T-type Intake Screen	1.0 (44)	12 (305)	44 (1118)	12 (305)
	2.5 (110)	20 (508)	66 (1676)	20 (508)
	5.0 (219)	30 (762)	76 (1930)	24 (610)
	10 (438)	36 (914)	112 (2845)	30 (762)
	20 (876)	54 (1372)	156 (3962)	48 (1219)
	30 (1314)	60 (1524)	198 (5029)	54 (1372)
	60 (2629)	90 (2286)	276 (7010)	84 (2134)
Half Intake Screen	1.0 (44)	18 (457)	56 (1422)	16 (406)
	2.5 (110)	30 (762)	76 (1930)	24 (610)
	5.0 (219)	36 (914)	112 (2845)	30 (762)
	10 (438)	48 (1219)	162 (4115)	42 (1067)
Drum Intake Screen	1.0 (44)	18 (457)	22 (559)	18 (457)
	2.5 (110)	30 (762)	30 (762)	30 (762)
	5.0 (219)	36 (914)	47 (1194)	36 (914)
	10 (438)	48 (1219)	68 (1727)	48 (1219)

Wedge Wire Screen Catalogue

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## **Category Display**

 $Choose \ the \ right \ intake \ screens \ based \ on \ your \ application \ and \ flow \ rate \ requirements.$ 



T Intake Screen

Half-Barrel Intake Screen

l Type Intake Screen



Drum Type Intake Screen



Small Pipe Type Intake Screen

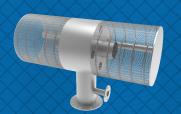
### **Differences of the 5 Types of Intake Screens**

Туре	Т Туре	Half Barrel Type	I Туре	Drum Type	Small Pipe Type
Structure	T-shaped profile with vertical slots or gaps	Open half-barrel shape	I-shaped profile with vertical or horizontal slots	Consists of rotating drums with perforated panels or mesh screens	Small perforations or mesh to prevent the passage of fine particles and sediment
Performance	Effectively prevent larger debris from entering the system, with efficient water flow.	Effectively protect aquatic life and filter larger debris, especially in marine environments.	Capture smaller debris and organisms, allowing water to flow through smaller intake systems.	Efficiently filter a wide range of debris and maintain continuous water flow in large systems.	Prevent clogging and minimize the risk of system damage.
Application	Inlets for pumps and large cooling water systems in water treatment plants, nuclear power plants, etc.	Suitable for low water level waters such as shallow streams and rivers, as well as the bottom of reservoirs.	Industrial, municipal engineering and agricultural water intake systems with flexible use of space.	Ideal for use in lakes or reservoirs where there is no linear flow pattern.	Ideal for industrial and agricultural use, where water sources with high levels of fine debris need to be filtered.
Features	Suitable for environments with low space constraints and high-flow waters.	Installed in certain flow waters, and underwater environments where T-type cannot be installed.	Effective capture of smaller particles and organisms with low maintenance requirements.	Can be installed vertically or horizontally to handle high flows and large volumes of water.	Designed for smaller diameter intake pipes to maintain reliable filtration and flow rates.

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### **Features**

Intake screen can play a significant role in providing water sources for various devices.

Maintenance free	It is a passive device with no moving parts and requires little maintenance.
High filtration efficiency	The continuous slots and large open area minimize clogging and maximize water flow.
Support customization	It comes in various designs and configurations to adapt to different depths, from deep to shallow.
Robust material	Stainless steel is corrosion-resistant and durable.
• Bio-friendly	It keeps aquatic life safe and protects pumps and equipment from harmful debris.

## **Applications**

Intake screens are capable of continuously extracting water from rivers, lakes, dams and oceans and are widely used in the following applications.

- Municipal water supply
- Water treatment plants
- LNG plants
- Desalination
- Paper & pulp
- Sugar mills
- Nuclear power plants