Wedge wire screen

Product

-**Wedge wire screen**

It consists of surface profile (profile wire / wedge wire) and support fin (support Rod) welding.
The distance between surface profiles is called `slot` and it filtrates impurities of flow.
It is being utilized in a wide variety of industrial area. (Groundwater development, Water treatment, Refining & Petrochemical, pulp & Paper, Food & beverage, Mining industry, Architecture & Construction etc.) It is considered as optimal choice for substitution of existing metal mesh filters.
We provide both Flat type and Cylindrical type of Wedge Screen products with a wide variety of slot sizes ranging from 25micron(0.025mm) to 20mm and serves various stainless steels (304, 304L, 361L, Duplex, Monel, Titanium etc) to meet customer`s requirements.

Cylindrical Screen

It is the most commonly used among profile Wire Screen. There are several different arrangements of screen to cater from outside to inside or inside to outside depending upon the flow direction as depicted below. Depending on your flow rate, open area, collapse strength, burst strength or tensile strength requirement, it will give optimal solution for you.

Flat screen(Flat panel)

Using a combination of different Profile Wire sizes and slot openings its common uses including solid to liquid separation, sizing of materials of dissimilar size, flow diversion and filter floors.
With the help of outstanding cutting technology available, various shapes of flat sheet of profile Wire Screens are available. All Flat Screen we provide are fitted with a surround frame to provide a complete and quality finish.

-**Tower internals(petroleum & refining)**

Support Grid

We provide Support Grid of versatile circular flat screen. It is used to retain and support catalyst/media and reduce the loss of extensive catalyst/media as well. Support Grid Hydro-desulphurization, Gas Driers, Hydrocracking, Alkylation and Sand Filters etc.
We design and manufacture a wide range of different type of support Grid Construction, depending ob applications and customer`s specific requirements. Support Grids are also commonly installed with other Tower Internals components such as Outlet Collectors and Inlet Distributors that can be supplied by us as well.

Outlet Collector

We provide Outlet Collector which is a cylindrical-shaped screen located at the bottom of a vessel/reactor. It is used to retain, support, eliminate the migration of catalyst/media and reduce+ the loss of expensive catalyst/media as well. This type of screen can also be used at the top on the vessel/reactor to serve as an Inlet Distributor. As with the Support Grid, our Outlet Collector is commomly used in axial flow processes including Hydro-treating, Ion exchanger, Hydro-desulphurization, Gas Driers, Hydrocracking, Alkylation and Sand Filers etc.

Strainer/Resin Trap

We make an effort to meet customer`s specific requirement in designing and manufacturing Resin Trap. We offers a Resin Trap Screen with the option for the pope housing. This screen system is primarily used as a safety device and is postioned immediately after the outlet nozzle of the vessel.
Resin Trap prevents:
Loss of expensive resins

Cross contamination of resins
Damage to pumps, valves etc. further process lines
Costly downtime and process disturbance
Environmental damage
It is mainly used in water treatment processes and other numerous media filter systems such as Ion-Exchanger, Activated Carbon, High Purity Water Systems.

Nozzle Screen

We provide Nozzle Screen with the options of gasket, washer and nut. These screen systems are primarily used in large quantities and positioned evenly over a circular nozzle plate located at the bottom of a vessel[Ion-Exchanger, Reactor]. The Screen Nozzle will both retain resin/media and uniformly collect and distribute process flow. Sizing, spacing and quantity of Screen Nozzles are critical factor of ensuring high efficiency and a resulting low pressure drop.
Nozzles will be fixed to the nozzle plate with the use of gaskets, washers and nuts that are available as well, Whether you are using a plain bottom plate or a rubber-lined bottom plate, We would provide the right solution for fixing the nozzle Screen for you.

Header & Lateral Screen

We provide Header and Lateral Systems to uniformly collect and distribute process flow in the water treatment facilities such as in `Ion Exchange` and in the process of removing organic matters etc. Slot sizing is a critical factor of ensuring that there is no resin/media migration.
The screen laterals are removable and can be designed with either a flange(Flange type) or Threaded nipple connection(Candle type).
Designing & Sizing of both the main header pipe and the screen laterals are based on customer's requirements and specified design conditions, recommended through-pipe and slot size to ensure higher efficiency and lower pressure drop.

-**Water process & Treatment**

Well Screen

It is al filtering device that serves as the intake portion of wells constructed in unconsolidated aquifers. The screen permits water to enter the well from the saturated aquifer, and prevents sediment from entering the well, and serves structurally to support the aquifer material.
Continuous –slot will screens provide more intake area unit area of screen surface than any other types of screen. This type of screen has maximum open area, For best well efficiency, the percentage of open area in a screen should be the same as, or great than, the average porosity of the aquifer material. Water flows more freely through a screen with a large intake area compare to one with limited open area. The entrance velocity is low, therefore head loss for the screen is at a minimum and finally minimizes drawdown in the well.
Reference: 1. Horizintal-Radical Water Collecting Well
2. Riverbed Filtration System

Passive Water Intake Screen

It is a physical barrier, separating marine life and debris from large volumes of water from rivers, lakes, reservoirs and the sea. Passive Water Intake Screen admits water through the intake point at a low, uniform velocity. Waterpasses through the screen while aquatic life and debris remain in the water source. The screen have no moving parts, therefore the term "passive". The passive is manufactured in high grade stainless steel for increased durability

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Automatic Self Cleaning System

It is a motorized strainer for the continuous removal of entrained solid from liquids in pipeline systems. With an automated control system monitoring the strainer operation, cleaning is accomplished by mechanical scrapping and integral backwash system. A small portion of the screen element is isolated and cleaned by reverse flow. We provide the Cylindrical Screen of Automatic Self Cleaning Strainer depending upon the direction of mechanical scrapping and integral backawash flows. Not only ICW, IAW but ECW type are available as an internal screen of Automatic Self Cleaning Strainer which we are confident of.

Automatic Tube Cleaning System

It gives the right solutions for maintenance problem of micro-fouling and scaling of heat exchanger and condenser tubes. A number of cleaning Balls circulation wipes out scale deposits and micro-fouling, therefore, increases reliability, performance, plant output and service life.
We, a specialize of WEDGE WIRE SCREEN, is capable of high quality and customized Strainer Screen with the option of additional plate process. Various wire specifications,slot sizing and screen materials are available depending upon the size of cleaning ball and flow characteristics.

-**General Industry**

Sieve band Screen

It is used in static sieves for either dewatering or classification of materials. It separates solids from liquids, the curved screen of a sieve bend provides greater capacity than flat wedge screens due to increased gravitational forces on material flowing against the curve. This successive wires and rods welding assembly creates a sieve, which presents more edges to the flow for superior separation efficiency. Dewatering and classification capability of the screen is determined by the percentage of open area. It can be made and designed for wide ranges of industries.

Scum drum Screen

It is another multi-purpose filter assembly that slotted cylindrical wedge wire drum rotates on two pillow blow bearings. The rotary drum is driven by a motor fitted to a shaft-mounted gearbox.
This type of screen openings:

1.The doctor blade scrapes the solids from the face of the screen surface.
2.the screened water cascades down inside the drum and falls through the bottom, creating a vigorous backwash action.

3. Automatic and cyclic internal water sprays of screen drum.

It is available of solid filtration with various slot openings range from 50micron(0.05mm) to 20mm.