Wedge Wire Screen Products





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For a wide range of industrial and process applications AMACS manufactures a complete line of Wedge Wire industrial screens. The Wedge Wire screen products are constructed of a series of parallel "V" resistance welded cold drawn wire, cold wound welded on perpendicular support rods. The result is a smooth plug resistant screen surface that is very structurally sound. AMACS Wedge Wire industrial screens provide superior performance in numerous process industries including chemical, petrochemical, refining and water treatment.

Advantages wedge wire screens offer when compared to other types of screening include:

- The wedge tapered opening becomes progressively wider increasing dewatering efficiency
- Non plugging, unlike mesh there are only two contact points to retain particles
- Slot sizes ranging from .002 to 1"
- · Durable and capable of carrying heavier loads without support structures
- One piece construction
- Flexibility in forming fabricating and shaping
- Wide range of materials
- · Low maintenance easy to clean
- Tolerance ranging from + .002 /- .001 to +/.005

OUR ENGINEERING GROUP

Our experienced staff provides the following custom support services:

- process analysis, troubleshooting and recommendation
- design to your performance criteria or specifications
- redesigns and retrofits to improve performance and cost effectiveness
- technical support
- quality assurance











PROFILE and SUPPORT CONFIGURATIONS

AMACS manufactures wedge wire screens and screen products to accommodate a wide range of requirements. Different construction methods can be employed to address flow direction and strength of the product. Standard AMACS screen products feature external circumferential wedge wire for outside to inside flow. Internal circumferential wedge wires can face the support rods for inside to outside applications. Support structures can be included for additional strength. Screens can be built parallel or perpendicular to the flow.



Catalyst Bed Supports

Support grids provide superior media retention characteristics in vessels of all types. They feature durable construction, precise open area, and are virtually non-clogging. For larger vessel diameters AMACS support grids are manufactured in sections to accommodate installation through man ways. Complete operating systems including inlet basket or distributor lateral, support grid and outlet basket with backwash systems can be designed for efficient and effective operations.

Hub and Header Laterals

Hub Laterals can be designed for disc head vessels enabling the system to collect completely to the bottom of the vessel. Header Laterals design are also available for flat bottom vessel distributor or collector applications. Systems can be designed to accommodate side, center, top or bottom inlet piping. Integral backwash systems can be designed for any hub and header lateral for fast effective and efficient cleaning. Connections of the laterals can be flanged or threaded. All systems are designed for effective liquid or solid retention in

> a wide range of applications including exchangers, clay

Nozzles, Strainers

AMACS Wedge wire screen retention nozzles are manufactured in accordance to customer flow requirements in almost any alloy. They can be designed for filtration or treatment systems to permit more effective use of the treatment media. Because of their non-clogging design wedge wire nozzles are effective in a wide range of water treatment and other industrial applications. Common applications include under drain media retention elements or flow distributors in demineralizers and water softeners in pressure and gravity sand filters. Nozzles can also be used as collectors at the bottom of the vessels by installing a number of nozzles uniformly across a tray plate. The combination of high open area and



makes this nozzle/collector application popular.

a non-plugging slot design

and sand filtration applications, carbon towers and power plants with water systems. Our experienced engineering group designs each system to provide even distribution or collection and to avoid flow/pressure concentrations.

Sieve Bend and Flat Screens

Wedge wire screens are particularly well matched to the requirements of high capacity filtration. These screens are self-cleaning, durable and reusable. The Sieve Bend (curve screen) with wedge wire perpendicular to the flow direction allows water to drop through screen to be collected as wastewater while the angle and flow allow the solids or branches to slide over. The product is effective in wastewater treatments, dewatering systems and other applications as well. Flat screen panels are used in a similar application as sieve bend and in shakers for sewage separation systems.

Resin Trap Screens

AMACS Resin Traps are placed in a housing, inline with the flow to capture expensive media from traveling downstream. We can design the traps to capture media particles of any size. With the continuous open slot, the traps provide sufficient open area to let process flow move smoothly. Our engineering group can provide a complete system including the housing design.

Inlet and Outlet Baskets

AMACS inlet and outlet baskets are designed to meet open area, designated temperature, and differential pressure specifications. Combination inlet basket or distributor laterals and outlet basket or collector laterals systems can be designed and manufactured to meet customer performance requirements or specifications. Backwash (reverse flow) systems can also be designed to automatically clean the screen products.





Numerous custom filtration application

For a myriad of standard or inverted flow filtration requirements AMACS separation specialists can assist you in designing a wide variety wedge wire screen and other separations products. For applications that require very fine particulate removal AMACS also manufactures a wide range of mist eliminators tower internals, and other components critical to effective mass transfer and separation. For complete details visit www.amacs.com

V-WIRE	•	•	•	•	•	•	
WIDTH	.047"	.058"	.060"	.090"	.069"	.118"	.090"
HEIGHT	.088"	.085"	.100"	.140"	.170"	.185"	.105"

SPECIFICATIONS

SUPPORT ROD		Round	• Round	Round
WIDTH	.090 F	.098 dia.	.125 dia.	.177 dia.
HEIGHT	.140 H			

NOTE: Other wires and rods available upon request.

Other AMACS Products

When it comes to effective mass transfer, separations and pollution control, come to AMACS Process Tower Internals. With a full range of separation products, we offer individual components or turnkey systems built to your specifications and/or performance requirements.

MESH and VANE MIST ELIMINATORS

from knitted mesh pads to vane mist eliminators and candle filters for submicron mist removal. We also manufacture our patented MistFix[™] insertion mist eliminator for applications where vessel access is prohibitive.



Vane type Mist Eliminator



Insertion Mist Eliminator



INLET DISTRIBUTORS many designs available including diffuser plates and cyclonic type distributors.



TRAYS for gas/liquid contacting in distillation,

absorption, and stripping applications-valve, sieve, bubble cap & special designs



RANDOM PACKINGS

to facilitate mass transfer under a wide range of applications.



STRUCTURED PACKING AMACS provides a choice of three types of structured packing.



LIQUID REDISTRIBUTORS

for effective collection and redistribution of liquids. AMACS offers variable options to meet a variety of performance requirements.



GAS INJECTION PACKING SUPPORT supports packing and provides effective gas distribution with low pressure drop.

WEDGE WIRE INDUSTRIAL SCREENS

for a wide range chemical processes including catalyst support beds, misc. filtration and much more.



STRUCTURED GRID PACKING for severe fouling applications



LIQUID/LIQUID COALESCERS we manufacture a variety of mesh and plate internals as well as turnkey systems for liquids and oil/water separations.



TURNKEY POLLUTION CONTROL PACKAGES

for asphalt, oleum, plasticizers, metal working, compressor stations, marine bilge and a wide range of specialty indoor air cleaning and outdoor removal of visible plumes. We also manufacture turnkey systems for separating a wide variety of gas, liquid and solid regimes.





PROCESS TOWER INTERNALS

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