

Wedge Wire Screens **Industrial Products**



About Our Industrial Screens - Hiranya Industries

At Hiranya Industries, we specialize in precision-engineered stainless steel Vee-Wire® screens that are widely used for liquid/solid and gas/solid separation. Renowned for their exceptional strength, long service life, and adaptability, our screens are manufactured using advanced continuous welding technology that ensures high durability and performance under demanding industrial conditions.

Our V-shaped wire is welded onto various support rods to create slot openings that increase flow capacity while minimizing clogging. This design ensures maximum open area, consistency in slot size, and resistance to abrasion, making it ideal for rugged operations across industries.



🕮 Custom Designed and Engineered

Each screen is custom-designed and engineered to meet specific client requirements. From initial consultation to final delivery, we offer complete technical support to ensure optimal fit and function.



Lower Maintenance and Less Costly

With low maintenance needs and high operational efficiency, our screens contribute to significant cost savings in the long run. Their superior construction reduces downtime, making them a cost-effective solution for any application.



Many Construction Options

We offer a wide range of construction options, including:

- Direct screening and filter media support (sand beds, activated carbon, resins, catalysts)
- Slot openings from 25 μm to 10 mm.
- Materials including standard 300-series stainless steel and specialty alloys
- Custom shapes such as cylinders, cones, flat or curved panels, and more

The flexibility of our manufacturing process allows us to deliver tailored screening solutions for new plant installations, upgrades, or any custom requirement.

A Highly Technical Product

At Hiranya Industries, our Vee-Wire® screening solutions are engineered with advanced manufacturing techniques to meet the most demanding industrial requirements. Our screens offer key advantages such as:

- Non-clogging performance
- · Large open area for maximum flow
- Low pressure drop
- High hydraulic efficiency
- Mechanical strength and abrasion resistance
- Easy cleaning and maintenance
- · High flow rates for improved productivity



Assured Quality

Every product at Hiranya Industries undergoes stringent quality checks throughout the manufacturing process. As an ISO-certified company, we adhere to detailed procedures that ensure consistent, reliable performance. Upon request, we provide quality documentation such as:

- · Quality and manufacturing plans
- Production and inspection reports
- Welder qualifications and procedure records
- Material analysis and mechanical test certificates



iv Industry Focus

Thanks to our flexible designs and precision engineering, our screens are widely used across various industries, including:

- Water & wastewater treatment
- Pulp & paper
- Chemicals & petrochemicals
- Mineral processing & aggregates
- Plastic extrusion
- Food and beverage
- Water supply systems
- Machine coolant filtration
- · Architectural applications

Applications We Serve

Our products are used across a wide range of liquid/solid and gas/solid separation processes such as:

- Filtering
- Media retention
- Sizing and classification
- Dewatering and drying
- Screening and straining
- Fish diversion and water intake systems
- Collection and separation processes



Reliable Field Service

Hiranya Industries provides full-service field support for repair, and system upgrades. Our expert team is available for:

- On-site supervision and solutions
- Full installation guidance
- Technical consultations
- Emergency service (available within 24 hours)

We ensure that your systems continue to perform at peak efficiency. Whether it's routine inspection, part replacement, or major repair, our field service experts are equipped with the right tools and knowledge to get the job done efficiently.

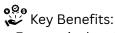


Cylindrical Screens for Outside to Inside Filtration Flow

Hiranya Industries offers a range of precision-engineered cylindrical screens optimized for outside-to-inside filtration flow. Our designs meet various industrial application needs with superior strength, efficiency, and cleaning flexibility.

Standard Construction

These screens feature external circumferential wire with internal axial support rods, providing a cost-effective yet reliable solution.



- Economical and durable
- Versatile for most filtration applications
- Accurate and consistent slot openings



- Filter cartridges
- Candle filters
- Rotating drum screens
- Resin traps
- Header laterals
- Nozzles

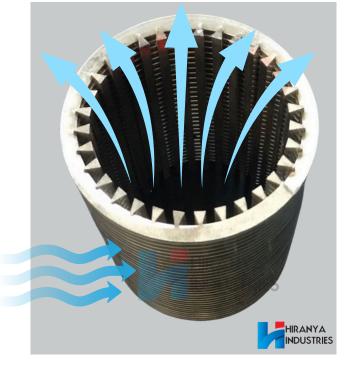
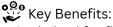


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Channel Rod Construction

These screens use U-section perforated channels in place of traditional support rods. Depending on the role, the filtration flow can be inside-out or outside-in.



- Optimized for fluid collection and distribution
- Eliminates the need for a perforated inner tube



- Potable water filtration
- Ion exchange systems
- Oil refining and petrochemical processes



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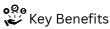


Cylindrical Screen for Inside to Outside Filtration Flow

Hiranya Industries offers a specialized range of cylindrical screens designed for inside-to-outside filtration. These configurations are ideal for efficient dewatering, smooth internal flow, and precise separation — ensuring consistent performance in demanding environments.

Internal Axial Wire (Wire-Based Design)

This construction features internal axial wire with external circumferential support rods, designed to optimize internal flow characteristics.



- Smooth internal surface enhances flow dynamics
- Compatible with internal axial scraper systems for effective cleaning
- Fluid travels across the wire edge, improving dewatering efficiency



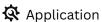
- Trommel screens with internal feed
- Rotary or screw-driven internal systems
- Dewatering systems
- Baskets
- Automatic filters

Inverted Design

This design uses external inverted wire with internal axial support rods, offering a simple and economical solution for specific flow configurations.



Cost-effective option for inside-out flow setups



• Systems operating with inside-out flow patterns





Industrial Screening Products

Flat Screens for Malting and Brewing Applications

At Hiranya Industries, we provide high-performance flat screens specifically designed for the malting and brewing industries. Our Vee-Wire® screen panels are engineered to optimize airflow, filtration, and cleanliness during each stage of the malting process.

Applications

- Lauer tubes
- Germination beds
- Kilning floors
- Ultrafiltration systems
- Steeping tanks
- Malt extraction lines

Screens are used in the kilning, germination, and drying phases. Our designs reduce "dead zones" in the malting floors, improving airflow and minimizing contamination. Their durable construction ensures long-term reliability, even under repeated thermal cycling and moisture exposure.



Illustration Image

Candle Filters for Precision Filtration

Candle filters from Hiranya Industries are built for fine, high-efficiency filtration in compact designs. These filter elements are ideal for applications where space is limited but performance is critical.



- Slim diameter (typically 50 mm)
- Extended lengths (often exceeding 1,000 mm and more)
- \bullet Fine slot openings: 50–5000 microns, customized to the application
- Suitable for direct filtration or as medium supports (e.g., diatomite-based filters)



Our candle filters are back washable — cleaned effectively with reverse flow pressure. Thanks to their rigid stainless-steel construction, they are highly durable and can be easily disassembled without damage during maintenance or filter replacement.



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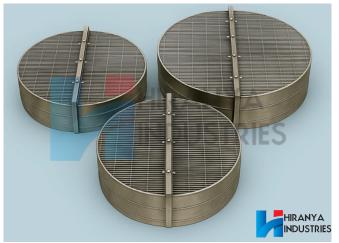


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Support Grids

The support grid system from Hiranya Industry is available in a variety of framing options and designs - either as a one-piece construction or in multiple sections for onsite assembly and easy retrofitting through existing manways.

Because of their strength, durability, and efficient flow characteristics, these support grids are widely used in hydro-treaters, desulfurizers, molecular sieves, gas sweeteners, ion exchangers, and other absorption systems.

😭 Features

- Slot size can be customized for direct media retention
- Grids can be supplied with support beams, rope packing, bolting, and all necessary accessories

e Benefits

- Self-supporting structure
- Excellent resistance to collapsing or buckling, even in operations where screens must handle very high loads
- More effective open area compared to wire mesh or grating
- Smooth surface reduces media abrasion

Cartridges and Outlet Baskets

A wide range of industries use cartridges from Hiranya Industry. These filter elements are rugged, precise, easy to clean, and ideal for various industrial processes.

Applications

- Conventional filtration (outside-in)
- Reverse filtration (inside-out)

Available Fittings for Custom Integration

- Collars
- Flanges
- BSP or NPT threaded end fittings
- Machined rings for O-rings or flat baskets
- · Other customized fittings

Centrifuge Baskets



Illustration Image

Starch Processing

Hiranya Industry's starch baskets are designed to fit into any existing or new centrifuge application. These Vee-Wire-type Centrifuge Baskets improve starch refining by providing accurate and customized slot sizes tailored to your processing needs.

- 😭 Features
- Improved fiber dewatering compared to nickel screens
- Extended wear life
- Designed and manufactured to match each centrifuge
- Variable slot openings from 50 mm to 1000 mm microns and above
- Fine wire construction prevents clogging
- Capable of withstanding high backwash pressures

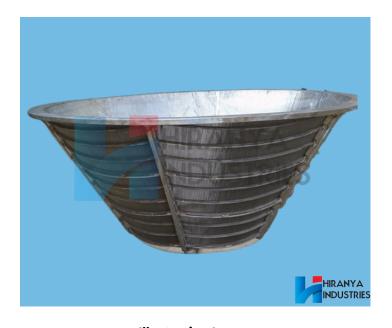


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Sugar Processing

Hiranya Industry's patented-style fine Vee-Wire continuous centrifuge baskets offer enhanced mechanical strength, precise slot openings, and a larger percentage of open area-helping to increase the recovery of sugar crystals.

The basket's self-supporting structure is designed and engineered to withstand the high stress and load conditions commonly found in the sugar industry.



Features

- Variable slot openings from 50 mm to 1000 mm microns and above
- Long-lasting performance with fewer change-outs
- High resistance to abrasion
- Quick and easy installation
- Low maintenance and easy to clean
- Replaces electroformed and laser-cut screens

Nozzles

nozzles are used in liquid, solid, or gas/solid separation systems. Their design and quantity can be tailored depending on the application and customer-specific flow requirements. These nozzles ensure more effective use of treatment media.

Common Applications Include

- Collectors and distributors installed uniformly across a plate or header lateral arrangement
- Demineralizers, water softeners, end pressure, and gravity sand filters

🗘 Features

- Standard diameter: 1.96 inches (50 mm)
- Typical slot openings range from 50 microns and more
- Threaded end fittings.
- Primarily made of stainless steel; optional materials like AISI or Kynar are also available

Benefits

- Economical and efficient design
- Non-plugging structure
- · High open area
- Excellent strength and corrosion resistance



Illustration Image

Screen Lateral Systems

These assemblies consist of a series of screen laterals connected to either a central header pipe or a hub. They are designed for effective media retention in a wide range of applications, including ion exchangers, clay and sand filtration systems, and carbon towers.

Features

- Lateral spacing, length, diameter, and slot opening sizes are based on individual system requirements. Slot sizes range from 0.002 in. (0.05 mm) and up, in 0.0004 in. (0.01 mm) increments. Diameters start from 0.79 in (20 mm) and go up.
- Assemblies are typically made with stainless steel grades like 304SS or 316LSS. Other exotic alloys are also available.
- The laterals can be connected using threaded fittings, couplings, or flanges.

Benefits

- The design enables uniform collection or distribution of gas or liquid through treatment media without dead zones.
- The system can be adapted for a wide variety of vessel sizes and shapes with side, center, top, or bottom inlet piping.
- Assemblies can be customized to accommodate flow in any direction.



Illustration Image



Illustration Image

DSM Screen (Dutch State Mines)

"DSM Screen, Parabolic Screen, and Sieve Band Screen are just different names for the same type of screen. They all have the same curved design and work the same way—to separate solids from liquids using gravity. The names change depending on the industry, but the product is the same."

DSM Screens designed for static screening in dewatering and classification processes. As slurry flows over the curved screen surface, the Vee-Wire® design — with wires placed perpendicular to the flow — captures solids while allowing liquid to pass through efficiently.

Made from high-quality stainless steel, this screen delivers up to 50% more open area using a narrower wire profile. For easier handling and installation, we also offer an innovative split-screen version, which helps reduce both weight and size.

Operational Benefits:

- No moving parts, which means low maintenance and high reliability.
- Energy-efficient as it relies solely on gravity (no power consumption).
- Excellent for continuous operation in demanding environments.

Key Features

- · Low installation and equipment costs
- Minimal maintenance needs
- Longer service life
- Precise slot openings (50 µm to 10 mm)
- Ideal for a wide range of applications
- Constructed with 300 series stainless steel





Illustration Image



Illustration Image

Cylindrical Baskets

Cylindrical Baskets designed for both out-to-in (standard) and in-to-out flow configurations. These screens are ideal for self-cleaning filter systems and screw press filters, and can be easily maintained using static scrapers.

- C Key Features
- Customizable dimensions to meet specific system requirements
- Available in various constructions using different wire and rod types
- Slot sizes starting from 50 microns
- Optional flanges and reinforcement rings for enhanced stability based on the application

Benefits

- Self-cleaning surface for reduced downtime
- High open area ensures efficient flow and separation
- Durable construction built to withstand demanding operating conditions



Illustration Image

Pressure Screens

We offer precision-engineered Pressure Screens widely used in the pulp and paper industry for stock preparation. These screens are also suitable for any filtration process involving fibers or fine solids.

- C Key Features
- Specially contoured wire profiles for enhanced efficiency
- Available in diameters from 200 mm to 1,500 mm
- Increased screening performance
- Chrome-treated surfaces extend screen life and reduce the need for frequent replacements

Benefits

• Continuous slot design delivers higher open area, resulting in improved throughput and screening efficiency



Illustration Image



Screw Press Screens

Our Screw Press Screens are designed for highperformance industrial dewatering applications using screw presses. Built with robust construction and precise slot accuracy, these screens withstand rugged operating conditions while delivering consistent moisture removal.

Widely used across industries such as pulp & paper, wastewater treatment, food and beverage, chemical processing, and agriculture, they are ideal for sludge dewatering, juice extraction, and industrial filtration processes. Their customizable design ensures optimal performance in both standard and specialized systems.

- Key Features
- Precisely controlled slot widths tailored to specific applications
- Custom designs to match unique system requirements
- Abrasion-resistant options available for demanding environments

Benefits

- High mechanical strength for long service life
- Maximized open area enhances dewatering performance



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Note: For confidentiality reasons, certain technical drawings and design details are not fully displayed in this brochure or on our website. For complete specifications or custom requirements, please contact us directly.

Loop Profile Wire Screens

Our Loop Profile Wire Screens are used in a wide range of industrial applications where strength and durability are key. This design eliminates the need for welding between the rods and wires, improving the structural integrity of the screen.

Thanks to our advanced Loop wire manufacturing process, manufactured using high-precision wire making and 400-ton press machinery imported from the United Kingdom.

we can offer great flexibility in profile shapes, opening sizes, and support configurations. These screens can be produced using a variety of metals—from standard carbon steel to high-performance alloys—based on the specific needs of your application.

Round support rods, available in standard diameters, provide excellent structural strength, long-term durability, and ensure precise slot spacing in wedge wire screen assemblies



"A wide range of looped wire assemblies and framing options are available. Contact us to explore our full range and discuss custom solutions tailored to your specific product requirements."

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Wedge Wire Passive Intake Screen

Wedge Wire Passive Intake Screens are precisionengineered filtration systems designed for submersible or inline use in rivers, lakes, reservoirs, and industrial water sources. These screens provide clog-resistant filtration by utilizing v-shaped wedge wires that prevent debris accumulation and allow continuous flow with minimal head loss.

Ideal for use in hydropower, municipal water treatment, irrigation, industrial cooling, desalination, and aquaculture—ensuring debris-free intake, protecting equipment, and supporting aquatic life.

🟡 Key Features :

- Wedge Wire Construction Precise V-shaped wires offer accurate slot sizing and prevent clogging
- Passive, No Moving Parts Reduces mechanical failure and energy consumption
- Custom Configurations Available in various sizes, diameters, and flow capacities
- Anti-Clogging Design High open area prevents screen blockage
- Corrosion & Wear Resistant Built for long-term submerged use in harsh environments
- Fish & Wildlife Safe Compliant with environmental regulations like EPA Clean Water Act (USA)

Benefits:

- Low Maintenance No moving parts mean minimal upkeep
- High Reliability Continuous operation with low risk of failure
- Environmental Compliance Meets aquatic life protection norms
- Improved Equipment Lifespan Protects downstream pumps, membranes, and valves
- Energy Efficient Minimal head loss ensures low energy demand
- Scalable Design Suitable for small irrigation intakes to large-scale industrial systems



Illustration Image



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Illustration Image

"Custom-Engineered Screens, Built for Your Application"

"Explore a glimpse of our work in the gallery below.





"Precision Engineered. Custom Built. Perfectly Suited for Your Application."

• Every design you see here is custom-built for a specific industrial need.





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No matter the industry,

we build what your process demands.













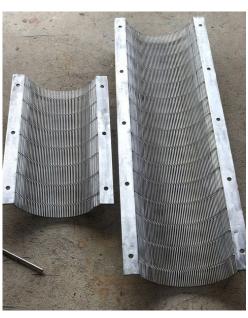
Our Product Packaging



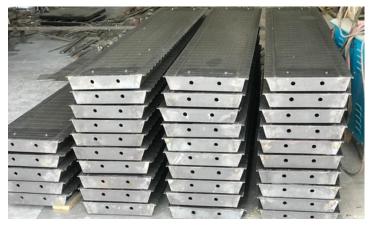








From water intake systems to filtration screens, each product is engineered with your application in mind.





Hiranya Industry – Standard Operating Procedure (SOP)

Delivering Precision in Every Filtration Component



🌠 🦴 1. Raw Material Verification

• High-grade materials (304SS, 316LSS, exotic alloys) are checked with Material Test Certificates (MTC).



🏿 🛠 2. Precision Fabrication

- Components like baskets, DSM screens, loop wire screens, passive intake screens, screw press screens, support grids, nozzles, centrifuge baskets, cartridges, and laterals are manufactured to design specifications.
- Slot openings are customized as per client requirements.
- Welding and machining ensure structural integrity and flow efficiency.



銜 🔍 3. Quality Inspection

- Each product undergoes slot size checks, corrosion resistance testing, and surface finish evaluation.
- Only approved items move to packaging; non-conforming items are reworked if necessary



4. Cleaning & Packaging

- Thoroughly cleaned to remove any residue or contaminants.
- Secure packaging with proper labeling ensures safe transit and easy identification.



5. Traceability & Documentation

- Every order is documented for full traceability.
- Inspection reports, work orders, and dispatch records are maintained.



Certificate of Registration

This is to certify that

HIRANYA INDUSTRIES

PLOT NO. 8, RAJ DEEP INDUSTRIAL ESTATE, ITOLA, DIST-VADODARA- 391243, GUJARAT (INDIA)

has been independently assessed by QRO and is compliant with the requirement of:

ISO 9001:2015

Quality Management System

For the following scope of activities:

MANUFACTURING & SUPPLY OF WELDED & LOOPED WEDGE WIRE SCREEN, MILD SCREEN, ROTARY SCREEN, INTAKE SCREEN & MACHINERY, FLAT PANEL, CONICAL BASKET, CENTRIFUGE BASKET, STRAINER, RUBBER PANEL, FILTER ELEMENTS & BIRDS GO GEL, SCREW PRESS MACHINE, SCREW PRESS SCREENS

Date of Certification: 28th March 2025 2rd Surveillance Audit Due: 27th March 2027 1rd Surveillance Audit Due: 27th March 2026 Certificate Expiry: 27th March 2028









Delivering Quality Through Precision: ISO 9001:2015 Certified Industrial Screens & Components



At Hiranya Industry, every product goes through a carefully controlled process to ensure performance, durability, and customer satisfaction.



Our SOP ensures:

- Consistent product quality
- On-time delivery
- Long-lasting performance in demanding environments

HIRANYA INDUSTRIES

Industrial Screens



PLOT NO.8, RAJDEEP INDUSTRIAL ESTATE, NEAR. JIN COMPUND, ITOLA, DIST VADODARA



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Monday to Saturday, from around 9:00 AM to 9:30 PM.



www.hiranyaindustries.com

"Reach out to us for your customized engineering needs - Let's build something great together."

Scan to visit our website





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