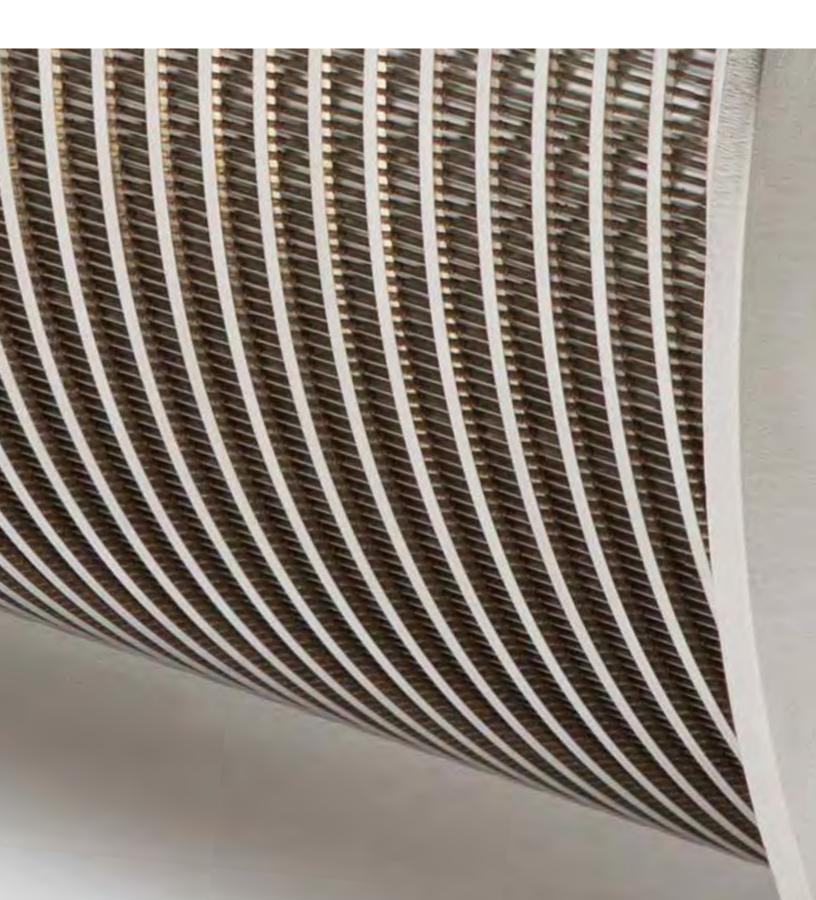


**Custom engineered Wedge Wire** screen products for the water treatment and process industries.



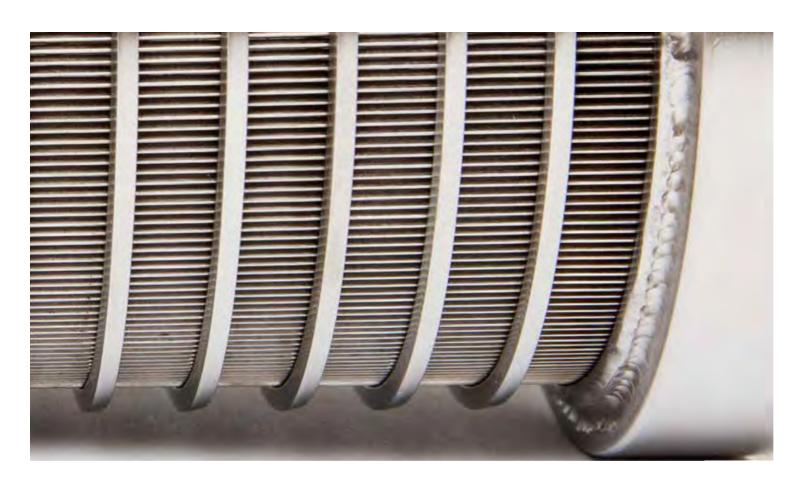
## Facts About "Wedge-Flow"

The quality of the final product begins long before production. Alloy, wire shape, size, and machine selection are some of the components that must be controlled in order to maintain our high standard for wedge flow quality. It's our attention to detail and commitment to quality that has given LEEM the enviable reputation in the water treatment and process industry. Wedge flow is manufactured by continuously welding an outer profile wire circumferentially in a helix pattern to a series of

longitudinal support rods. The helix pattern in combination with the profile wire determines the slot opening. Wedge flow is manufactured in cylinders starting at 5/8" diameter and slot openings starting at .001". Alloys available include 304, 316, 430, Monel 400, Duplex, Super Duplex, C-276 and many others available upon request.

We believe that the design and fabrication versatility of LEEM Wedge Flow makes it the ideal filter component for the fluid treatment industry.

- Resistance to clogging
- High strength
- Easily cleaned
- Alloy availability
- Low cost
- Short lead times



# Screen Nozzles

LEEM "WEDGE-FLOW" screen nozzles have distinct advantages in that they are economical, non-clogging and ideally suited as collectors and distributors. Efficient and easily installed in false bottom configurations, as well as in combination with lateral systems.

'T' bolt, coupling, MNPT and custom designed connections are equally available.

LEEM Wedge Flow nozzles have additional process advantages.

- Eliminates stagnant media on vessel bottom.
- Reduces abrasion of filter surface caused by vertical bed movement.
- Precisely controlled flow characteristics.
- Design is ideally suited for highpressure applications.
- Also available as replacements for existing installations.

LEEM Filtration will design and engineer a custom nozzle solution for your system internals.





## Lateral Systems

LEEM Wedge Flow lateral systems are precision engineered to maximize bed utilization and provide uniform collection and distribution patterns. LEEM offers complete engineering assistance in the design and development of new systems as well as improving and replacing existing installations.



#### **HUB LATERALS**

This design is commonly used in sand filtration, activated carbon columns, and demineralizer vessels up to 8' diameter. Wedge Flow laterals are often designed in a multi-tier pattern as well as angled to conform to the vessel head configuration.



#### **HEADER LATERALS**

Wedge Flow header-lateral systems are designed as collectors and distributors in larger vessels. These are optimum systems where mid-bed or regenerant processes are employed. Units are custom designed for either side or center vessel configuration and can accommodate threaded nozzle or pad connections.

### Flat Underdrains

Wedge Flow product quality is an absolute necessity in the design and manufacture of flat retention screens. Our underdrains are manufactured in varying slot sizes depending on the application and media that needs to be retained. In addition, a massive support structure, capable of withstanding up to 150 psi and higher pressure differentials, is often required. The importance of engineering expertise and attention to detail

during production cannot be understated. Our A.W.S certified welders work side by side with engineering during all phases of design and manufacture. Retaining screens are commonly installed by bolting or welding directly to the vessel and become a vital part of the process. The understanding of your process requirements guides LEEM Filtration in the design of your project.



# **Custom Designed Laterals**

LEEM Wedge Flow laterals are custom designed as replacements for existing installations. Exact replacement is accommodated as well as re-engineered to improve process fluid dynamics. Major improvements can be realized without increasing costs. Retention, drainage patterns, and alloy selection are a few of the criteria that can result in process improvements. Careful consideration to existing internal configurations can result in substantial overall savings.





## **Resin Trap Strainers**

Retention, fluid viscosity, specific gravity, corrosion rate, and pressure drop are all important factors in the design of LEEM Resin trap strainers. LEEM strainers are fabricated to your requirements by AWS certified welders. Reverse flow, backwash, gauges, drain connections and sight glasses can all be economically incorporated.

Wedge Flow baskets can be supplied as standard, assuring retention integrity and ease of maintenance. Baskets can be designed to withstand full line pressure in either flow direction. LEEM Resin trap strainers conform to standard industrial dimensions and are used throughout the water and process treatment industries.



### **North American Filtration Family of Companies**



North American Filtration, Inc., is the holding company to five companies, representing eight major product lines servicing the chemical, food processing, water and wastewater industries.

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Mermade is the world leader in the design and development of commercial pool filtration systems and a major supplier of commercial sand filter systems, fiberglass pool and industrial pump strainers, level control (positive valves), reducers, segmented surge/balance tank, and custom fabrications. Mermade is noted for its innovative designs and the quality of its products.

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NEFCO is a major provider of engineered fiberglass products to the Water and Wastewater Treatment Industry. NEFCO was founded in the late 1980s in Stamford, Connecticut. The company produced the first operational FRP Density Current Baffle for the Stamford WWTP based on a concept developed by Bob Crosby and the Stamford treatment plant staff.

nefco.us 561-775-9303



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