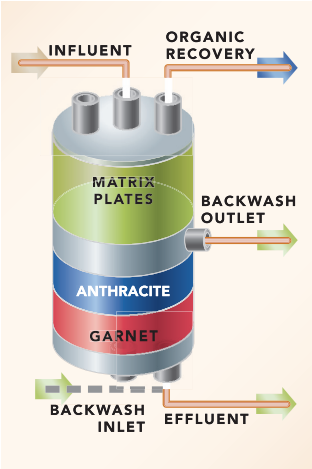
Mining Media and Matrices

Quality components for reliable filtration

FLOW DIAGRAM



Filtration Media

SpinTek offers a complete and comprehensive approach to media filtration for solvent extraction applications in copper, nickel and zinc mining. We provide cost-effective filtration solutions for SX-EW circuits; trouble-free operation; and long-term customer satisfaction. SpinTek has installed hundreds of filters world-wide, some operational for 20 years.

Anthracite

The top layer of media is coarse anthracite that has been selected to provide the majority of organic coalescing from the aqueous stream. It also acts as a coarse filter media prior to the primary filtering garnet bed. The anthracite used in SpinTek SX filters meet the following specifications:

Mesh	0.8-0.9 mm
Effective Size	0.8-0.9 mm
Range	0.8-0.9 mm
Uniformity coefficient	1.3
Density	859 kg/m³ (58 lb/cf)

Garnet

The filtering layer of media in a SpinTek SX filter is a fine crushed garnet. The garnet, while also acting as a coalescing media, is the primary filtering layer which provides the ten micron rating of the filter.

Mesh	30-40
Effective Size	0.42-0.58 mm
Range	4.83 mm
Uniformity coefficient	1.33
Density 2,187 kg/m³	(125 lb/cf)

Sand

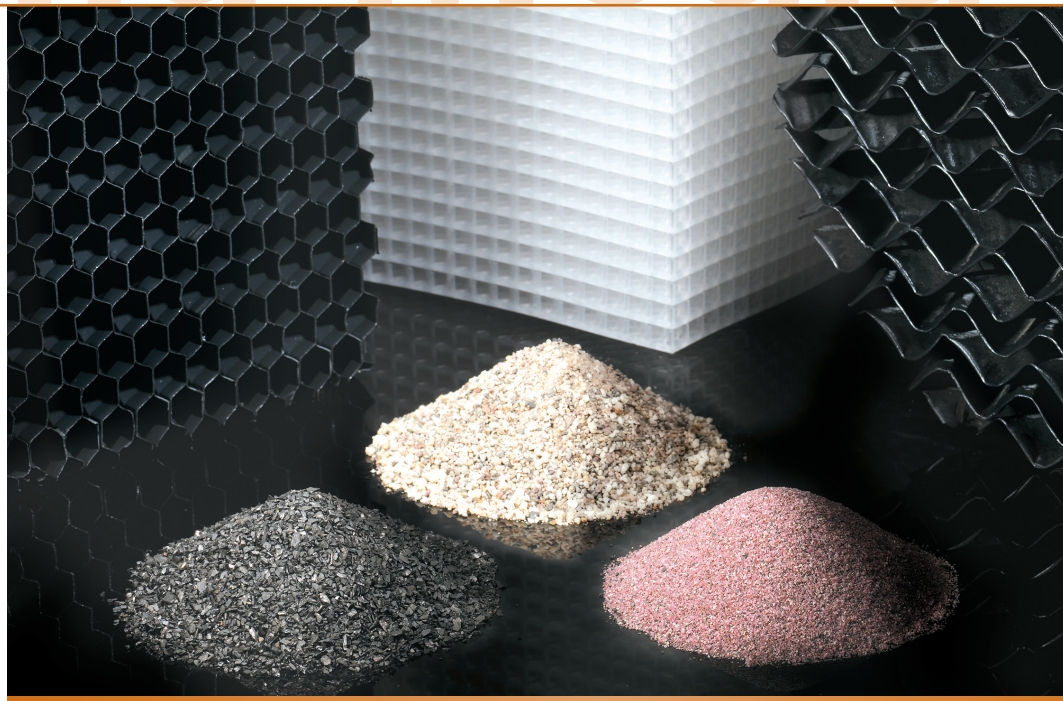
As sand layer is used to fill the lower head of the pressure vessel below the outlet laterals and serves as a support bed for the garnet.

Mesh	6x12
Effective Size	1.8-2.5 mm
Range	1.7-3.33 mm
Uniformity coefficient	1.3
Density	1,620 kg/m³ (100 lb/cf)

Mining Media

KEY BENEFITS

- **Matrix materials are engineered for durability and efficacy**
- **Filter media is precisely manufactured to minimize fouling**
- **Spintek matrix materials and filter media are designed to maximize the use life and effectiveness of Spintek equipment**
- **Single-source, reliable and consistent solution**



SpinTek filtration
Advancing the flow of industry

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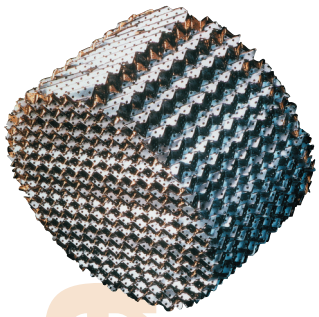


Matrix plates

SpinTek Matrix Materials

Our structured packing products incorporate engineering solutions which feature high mechanical strength, durability, high efficiency, and ease of maintenance and installation. They are available in a variety of materials and adaptable modules.

A Matrix for Every Application

Matrix materials are specifically engineered to facilitate the interaction of air, gases and water for mass and heat transfer in counter-flow or cross-flow applications.

Self-supporting Corrugated Synthetic Media are fabricated in conveniently sized modules from rigid polyvinylchloride (PVC), polypropylene and, for service to 265°F, glass-coupled polypropylene. Sheets are corrugated and assembled in a cross-corrugated pattern with alternating sheets at a designated angle, typically 60 degrees.

Metal Matrix is manufactured in rugged 316L Stainless Steel and other alloys for applications where superior resistance to heat and/or corrosion is required.

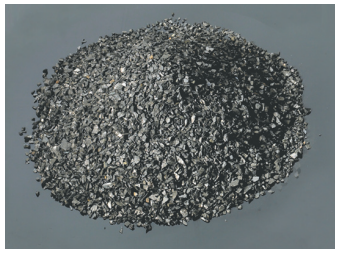
Polypropylene PN Fill is ideally suited for high-solids mass and heat transfer applications. Its unique construction and shape deliver high performance, durability and ease of maintenance.

Designed to Perform

Whether the task is removal of contaminants for environmental reasons or the recovery of clean gases for reuse, SpinTek matrix materials set the standard in gas cleaning systems. Cleaning efficiency, mechanical durability, and ease of installation are advantages which make these products versatile engineering solutions. In the oil/water separation industry our polypropylene packing (which is extremely oleophyllic!) and our stainless steel packing are widely used as coalescing media.

SPECIFICATIONS

Matrix Type	Corrugated	Metal	Polypropylene
Surface area flute size	42 or 68 sq. ft./cu. ft 3/4" or 1/2" nominal	42 or 68 sq. ft./cu. ft 3/4" or 1/2" nominal	21 sq. ft./cu. ft
Available Material	PVC Polypropylene Glass-coupled Polypropylene	316L Stainless Steel (Other alloys available by special order)	
Temperature Rating	130°F (PVC) 175° (Polypropylene) 265° (Glass-coupled Polypropylene)	N/A	165°F



Anthracite

Garnet

Sand

Mining Media

SpinTek*filtration*
10863 Portal Drive
Los Alamitos, CA 90720 USA

Telephone: (714) 236-9190
Facsimile: (714) 236-9196
Internet: www.spintek.com

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