

Sinterflo® MC

Fluidizing Media

Sinterflo® MC Fluidizing Media, multi layered, diffusion-bonded stainless steel mesh is available in 316L and other alloys. This precision Fluidizing Media is available in both Lo Flow and HI Flow rates, to meet your application requirements.

Usually available in stock, for immediate delivery, the media is supplied as flat-panels, up to a seamless size of 40" x 60" (1000mm x 1500mm), and in an unlimited size in butt-welded sheets.

Porvair Filtration Group provide complete fabrication services for this material, including custom sizes, shapes, mounting holes and welding to end fittings or rings. We can also fabricate into tubes or fluidization cones for hopper bottoms.

For fluidizing applications where a tightly controlled efficiency rating is required, **Porvair Filtration Group** can provide a precision fine filter mesh (down to 2 microns nominal) sintered to the fluidizing media. This is particularly useful in reducing particulate bypass, clogging and when fluidizing gas is not flowing constantly.

Sinterflo® MC fluidizing media is particularly suited to demanding applications where high operating temperatures of up to 1000°F (540°C), increased chemical or high abrasion resistance is essential, such as silo discharge cones, fluidized reactors and fluidized dryers.

This material is easily custom engineered to meet required specifications of materials, strength, flow requirements, thickness, micron rating and environment.



Features and Benefits

- High operating temperatures**
 Continuously up to 1000°F (540°C) with intermittent operating peaks up to 1200°F (650°C).
- Robust and self supporting**
 Fabricated shapes usually do not require complex and expensive support structures or joining strips.
- Application and material versatility**
 Can be easily sheared, formed, punched and welded, using standard manufacturing methods, into cones, tubes, custom shapes or flat panel, up to a seamless panel size of 40" x 60" (1000mm x 1500mm).
- Enhanced chemical resistance**
 Can be constructed from a wide range of materials including 304 and 316L stainless steel, Hasteloy®, Inconel® and Monel®.
- Cleanability**
 A wide range of cleaning methods can be used; as a result the media can be sterilized for use within the food and pharmaceutical industries.
- Abrasion resistance**
 Non-shedding media, highly resistant to mechanical abrasion.
- Design and engineering versatility**
 Easily custom engineered to meet required specifications of materials, strength, flow requirements, thickness, micron rating and environment.



Cross section of Sinterflo® MC



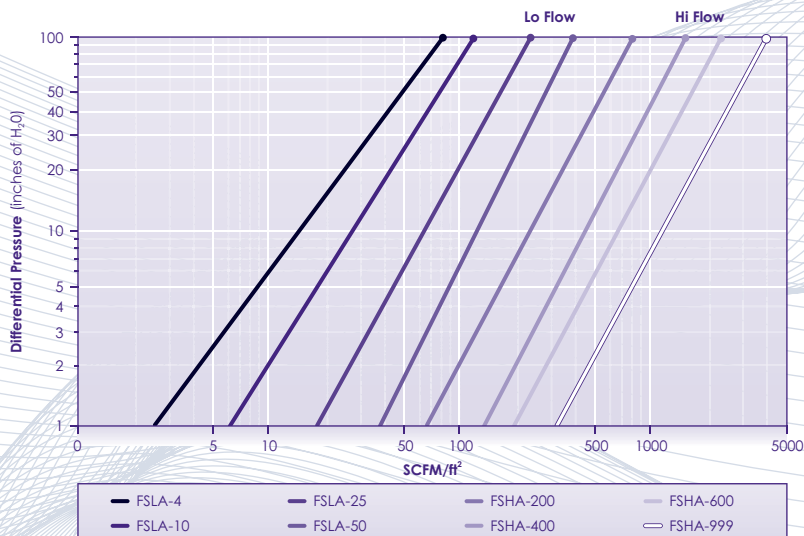
Sinterflo® MC Fluidizing Media Technical Specifications

FSLA Standard Lo Flow Fluidizing Media Grades

Grade	Airflow (SCFM/ft ² @2 inches of H ₂ O)	Nominal Thickness in (mm)
FSLA-0005	5	0.054" (1.37mm)
FSLA-0010	10	0.058" (1.47mm)
FSLA-0025	25	0.062" (1.57mm)
FSLA-0050	50	0.065" (1.65mm)

FSHA Standard Hi Flow Fluidizing Media Grades

Grade	Airflow (SCFM/ft ² @6 inches of H ₂ O)	Nominal Thickness in (mm)
FSHA-0200	200	0.040" (1.02mm)
FSHA-0400	400	0.047" (1.19mm)
FSHA-0600	600	0.052" (1.32mm)
FSHA-1000	1000	0.064" (1.63mm)



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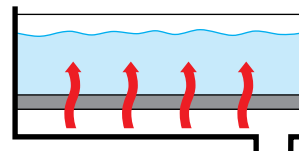
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Sinterflo® MC Fluidizing Applications

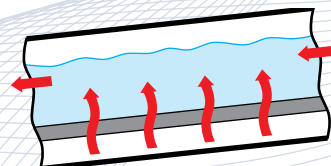
Fluidized Beds

In this application air is pumped through a horizontal or inclined section of Sinterflo® MC media thereby levitating a wide range of materials such as flour, cement, or paint particles. The air in this application can also be used for drying the product or in some cases imparting additives.



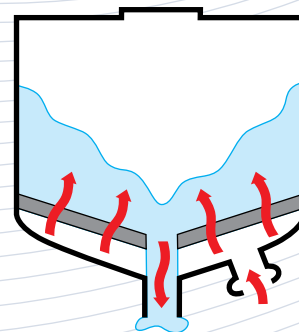
Fluidized Gravity Conveyors

In this application a second flow of air is introduced at a 90 degree angle to the fluidizing media to move the product forward for secondary processing (i.e. roasting) or transportation.



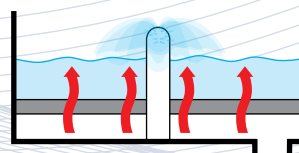
Fluidized Hoppers

When formed in to conical shapes Sinterflo® MC media will prevent 'bridging' of particles/powders and increase the speed of discharge. This is especially critical in the unloading of railcars.



Gas Spargers

When submerged in a liquid environment the air passed through Sinterflo® MC media will create a fine bubble field that aids more efficient oxygenation. This process is used in the electro-plating, fermentation and water treatment industries.



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