Steam Filter



Why you need filtered steam

<u>To protect costly equipment</u>, maintain processing efficiency and reduce downtime, it's important to remove scale and debris that are common in most systems. Filtered steam will protect valves, process equipment and process filters from damage.

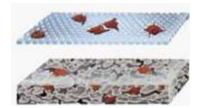
To protect product purity you need culinary grade steam with particles no larger than 5 microns. When filtered through a MICROPURE Steam Filter, steam used to agitate, mix or cook food will be free from contaminates which can spoil the appearance, smell or taste of your product.

How MICROPURE does it better

Woven stainless steel filter media – supported by stainless steel segmented discs in a stainless steel housing – maintains its integrity under conditions that cause conventional sintered media to disintegrate.

Unlike other filter media that have a shorter life and must be disposed or removed frequently for acid cleaning, MICROPURE filter media can be easily and repeatedly cleaned by backflushing for a full year under normal use. When replacement finally becomes necessary, the cost is considerably less than our competitors. The reason: only the media is replaced, not the entire element.

The picture to the right shows the difference between the two types of media. Our media traps all particles upstream where the competitor's filter traps the particles. Our media



has a one year warranty on strength and integrity and the competitor's cartridge can disintegrate after repeated heat treatments.

MICROPURE has the filter size you need from 10 lbs/hr to 10,000 lbs/hr (at 250°F, 32 um grade). If requirements change, you can often keep the same housing. By changing the media porosity or the number of segmented filter discs you can meet your new requirements. With MICROPURE, steam filtration is simple, effective and cost efficient.

No other filter offers this combination of features:

- Segmented design allows exchange of media to meet changing requirements, inspect elements, or to replace old elements
- Available in multiple sizes from 3 to 50 microns and 4 diameter sizes for exceptional versatility
- Meets all culinary steam standards
- Housing and Segmented Discs warranted for 5 years
- Bi-directional flow capability
- Built of high grade stainless steel- to tolerate extreme pressure and temperature variations for unlimited reusability
- Easy to design into virtually any process system



MICROPURE® FILTRATION

Steam Filter

The patented segmented construction of MICROPURE filters offers

significant advantages over conventional cartridge filters (shown above).

Steam flows into the openings on the outside of each segment disc and passes through the filter and into an adjacent disc. Filtered steam exits through the opening at the center of the cartridge, free from contaminants that can affect the quality of your product.

Flow rate information based on saturated steam at 29.8 psia (250°F)/2.1 bar (121°C). For other pressures, please consult the table below.

Temperature		Pressure		Multiplier
		PSIA	BAR	
212∘F	100°C	14.7	1.0	1.4
2121 284∘F	140°C	52.4	3.6	.7
320∘F	160∘C	89.6	6.2	.5
356∘F	180∘C	145.4	10.0	.3

Technical Data

Maximum Operating Pressure Maximum Differential Pressure	232 psig 75 psid	16 bar 5.2 bar
Maximum Reverse Pressure Pore Sizes	75 psid 3,5,10,25,32,5 (Other sizes available u	
Material of Construction:	•	
Housing	304 SS	
Segmented Filter Discs	304 SS	
Filter Media	304 SS	
O-Rings	EPDM	

Warranty

Micropure Filtration, Inc. provides a five year limited warranty on all parts except O-rings and media. A one year warranty on filter media is based on periodic backflushing to prevent overloading. These warranties extend only to components purchased from Micropure or a certified Micropure Filtration Vendor.

Culinary Steam Standards

3A Accepted Practices for a Method of Producing Steam of Culinary Quality requires particulate filtration to 5 microns and larger (Reference No. 609-00;D.2).

Ordering Information

Please contact us by phone or email to set up an evaluation of your steam system requirements and proper filter sizing.

MICROPURE® FILTRATION

777 East 82nd Street Cleveland Ohio 44103 (800)654-7873 (952)472-2323 **Fax**: (216)361-0500 <u>tsenney@micropure.com</u> **Web**:www.micropure.com

Steam Filter

Flow Rate vs. Differential Pressure Charts

