

ADVANCED MATERIAL SOLUTIONS

DURASTER[®] METALLIC
MICROFILTRATION MEMBRANES

DURASTER[®]

- Durable metallic membrane from high-value alloys
- Long life
- High temperature, pressure and chemical compatibility



BULLETPROOF INDUSTRIAL FILTRATION

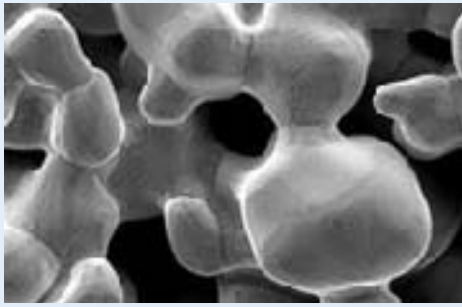


Industrial Crossflow Filtration System

Advanced Material Solutions (AMS) can supply fully automated, complete DuraSter® cross-flow membrane microfiltration systems or DuraSter® membranes in membrane modules or trains. The AMS DuraSter® range of metallic microfiltration membranes offer a new level of performance, corrosion resistance, and durability in cross-flow membrane micro-filtration. The DuraSter® membranes have a uniform pore size distribution and a high percentage of open area, which lead to higher flux

compared to other crossflow membranes. They are suitable for high pressure, high temperature, high and low pH and can offer high resistance to corrosion and oxidization in aggressive media. They are highly resistant to thermal and pressure shock. They can be repeatedly cleaned, using caustic and acid, solvents or steam, back to day-one performance. An investment in AMS DuraSter® membranes or systems is an investment in robust, long-term, high performance cross-flow with no worries and no cartridge replacement.





*Scanning Electron Micrograph of Filtration
Membrane Surface*



[Metal Injection Moulded Components

NO SEAMS, NO WORRIES

Using a unique, patented process, AMS manufacture the DuraSter® range of tubular metallic microfiltration membrane from 3-30mm diameter in lengths up to 1600 mm with no welds. No other metallic membrane manufacturer in the world can match this. The membranes are then modularized using a high impact- and temperature-resistant composite resin compatible with chemical and steam cleaning. Resin options include certified food grade and compatibility with a client-specific products and processes.

The resulting DuraSter® metallic membrane module is thus virtually “bulletproof” - no weak points for corrosion to begin, capable of operating at pressures up to 10 bar and temperatures of 200 °C at a pH in the range of 0 to 14.

HIGH VALUE MATERIALS—HIGH DURABILITY AND COMPATIBILITY

The DuraSter® range of tubular metallic microfiltration membranes and modules can be made from any of several alloys, ranging from 300 series stainless steels to Duplexes, Super Duplexes, High Nickel Alloys or Titanium. Thus the metallurgy of your membrane or filtration system can be selected to suit your process and products.



INDUSTRIES SERVED

- ◆ *Water and wastewater*
- ◆ *Chemical production*
- ◆ *Food and beverage*
- ◆ *Pharmaceutical*
- ◆ *Mineral processing*
- ◆ *Bio-fuels*
- ◆ *Pulp and paper*



*AMS Vacuum/Hydrogen Sintering
Furnace with Metallic Membranes*

APPLICATIONS AND PROCESSES

- ◆ *Fouling protection on RO systems*
- ◆ *Removal of impurities from super-saturated feeds*
- ◆ *Suspended solids removal*
- ◆ *Beverage clarification*
- ◆ *Effluent stream processing*
- ◆ *Steam filtration*
- ◆ *BOD reduction*
- ◆ *Chemical recovery*

FOR MORE INFORMATION PLEASE CONTACT



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