Nanotechnology Sub-Micron Filtration Membrane

Mott Corporation introduces a revolutionary nanotechnology porous metal membrane. This technology represents a breakthrough in porous metal manufacturing and for those applications requiring ultra-fine, sub-micron filtration. Utilizing a proprietary manufacturing process, Mott uses nano-materials in either stainless steel or titanium to create a true all-metal membrane capable of achieving levels of filtration and separations (> 7 LRV @ 0.2 micron) previously attained primarily by polymeric media. Comprised entirely of stainless steel or titanium, these membranes are bio-compatible, and highly inert to organic and inorganic materials, proteins, and virtually impervious to most commonly used chemicals.

This technology allows for ultrafine filtration capable of withstanding extreme temperatures, pressures, and corrosive environments. The dual density membrane consisting of a single metallurgy is fully sintered affording superior strength, durability, and performance characteristics. As a homogeneous metallurgical structure, there are no epoxies, binders, or other joining materials used in the fabrication of components, making the Mott nanotechnology materials ideally suited for applications in medical, life sciences, bio-technology, and pharmaceutical markets, as well as having potential for aerospace and alternative energy applications.

Mott’s nano-coating technology is available in form factors ranging from small disc filters and frits, to standard 10” cartridges with 222 connectors or 226 connectors with locking flanges.

Mott Corporation has been providing engineered solutions through the use of porous metal technology and development since 1959. Applications and processes are enhanced through the use of porous metal because it is cleanable, durable, and has uniform porosity.

Mott has design/development teams that continually engineer porous metal components, sub-assemblies and finished products for applications in a wide variety of industries, including biotechnology, medical, chemical, petrochemical, instrumentation, food and beverage, semiconductor, and alternative energy. Contact our design team and let us show you what porous metal can do for your next engineering challenge.

Mott Corporation
860-747-6333; www.mottcorp.com [1]

Source URL (retrieved on *05/23/2013 - 5:58pm*):
http://www.mdtmag.com/product-releases/2013/01/nanotechnology-sub-micron-filtration-membrane

Links:
[1] http://www.mottcorp.com