



S2.1.4, Comparison of Bekipor[®] Filter Media to Woven Wire Mesh

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Bekipor[®] metal fibers are thin metal filaments, produced in various alloys to meet specific application requirements. Bekipor[®] metal fibers range in diameter from 1.5 to 80um and are utilized in the composition of sintered metal fiber media. These porous metal fiber media have been used for over 40 years in highly demanding applications, where high porosity must be combined with chemical corrosion and temperature resistance. The use of metal fibers in such a fine diameter range (only a few microns) makes it possible to develop filtration media that has superior filter characteristics for a variety of liquid and gas filtration applications.

An overview of the design and manufacturing of this media will be provided, and as well as detailed test data for dirt holding capacity, efficiency, and permeability. This recent independent testing of the Bekipor[®] sintered fiber metal filter media compared its filtration efficiency, permeability, and dirt holding capacity to commercially available woven wire mesh.

This presentation also includes a video animation of debris passing through the Bekipor[®] filter media and highlights the high porosity and tortuous pore path of the media.

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Mark Willingham is N. American Market Manager for Bekaert Fibre Technologies, a Belgium based manufacture of sintered metal fiber filter media. He is former President of Filtrate Solutions and former Vice President of Sales for Purolator Advanced Filtration, a Clarcor company.

He has over 30 years of experience in the area of porous metal filter products for applications in the oil & gas, chemical processing, nuclear power generation, polymer, and general industrial markets.

Mr. Willingham began his career in filtration in 1981 as part of a family owned professional filter cleaning service company, ending his tenure there as Vice President of Business Development when his family sold the business to others within the company. He then began a career with Purolator Advanced Filtration, serving in various sales management positions for 20+ years.

Mr. Willingham is past chairman of the AFS (2013-2014), an AFS Fellow, and has presented numerous technical papers on porous metal filters at AFS conferences.

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