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LIQUID BAG FILTER TESTING & EVALUATION

Status: Accepted

Category: 2 Filter Testing

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Paper to be presented at

AFSS Fall Topical Conf. on Filter Testing

Ellicott City, MD

October 5-7, 2010

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Keywords: Porometry, Bag filtration, Filter bag geometry, ISOCTD Challenge Testing

ABSTRACT

Liquid filter bags are universally used in a variety of industries particularly for paint, ink jet, pigment & wastewater filtration. Needle-punched felt bags are primarily used but more rigorous micron-rated media are becoming more prevalent. In addition, multiple geometries are now offered for greater surface area per individual bag. Another issue with bag filtration (other than simplicity and low cost) is the lack of uniformity between manufacturers and their confusing micron ratings. This paper will address how Capillary Flow Porometry (CF) can be used to unambiguously assess micron ratings; how actual ISOCTD challenge testing can be used; and how full-scale testing can be done to assess efficiency and life.

Bio

Dr. Mayer is a Senior Consultant with DuPont, Wilmington, DE specializing in SLS technology since 1980. He received his B.S. and M.S. Chem. Eng. Degrees from Columbia University, New York City, NY and Ph.D. in Chem. Eng. From U. of Delaware, Newark, DE. Dr. Mayer has a brilliant professional career, among his numerous awards are Tau Beta Pi, Sigma Xi, Deans' Lists, 3 Eng. Excellence Awards, 7 Environmental Respect Awards, Class 'A' bonus, AFSS Frank Tiller award in 1996, AFSS Fellow award in 2000, and Lifetime Achievement award in 2005 (first non-academic to receive it). He is a member of AWWA, AIChE, WEF, and AFSS (Board of Directors since 1988, Chairman of Chapter Affairs/Users Committee; plus member of three other committees). He has organized/chaired three technical conferences and was the Co-chair of World Filtration Congress in 2004. He published over 200 papers/publications and has 2 patents.