0021

The Influence of the Expansion Process on Pore Size

Status: Accepted

Category: 2 Filter Testing

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PolyGrid™ precision-expanded plastics from Dexmet are used in filtration applications requiring membrane support, purification and separation. Designing a precision expanded plastic material with unique characteristics such as pore size, resin type and thickness are critical factors in selecting filter media. Dexmet's proprietary expand process is capable of expanding all fluoroplastics, polyamides, polyesters and many other types of high temperature resins in film thicknesses of 0.001" - 0.090"; with pore sizes down to 25 microns .

An introduction to Dexmet's expand process, clean room capabilities and product range will be presented along with test and measurement data encompassing two types of resins materials. A capillary flow test method will be used to determine how the pore size is affected when the strand width and film thickness is decreased by a constant percentage using identical tooling.

Bio

Deborah Christoff is the Product Manager for Structural Materials at Dexmet Corporation. She has been with Dexmet for over 19 years and has an AS degree in Industrial Management from NVCC in Waterbury, CT.