

"Challenges with HEPS/ULPA Wetlaid Glass, Membranes and Nanofiber Filter Media".

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Abstract:

The HEPA/ULPA filter market is defined as efficiency greater than 99.97% on the 0.3 micron particle size. This presentation will cover the different global standards regarding filter classification for overall efficiency, local area penetration, and particle size. Different types of filter media (wet laid glass, membranes and nanofiber) will be compared in the key characteristics of efficiency, pressure drop, dirt holding capacity (life), cost and processability. Additional information will be provided concerning the relationship between efficiency and pressure drop in designing filters and additional design factors such as UL fire rating, Durability of the filter in use and sealing the media pack to the frame. The paper will discuss in some depth un-met needs for HEPA/ULPA materials and filters.