

S1.1.3 OVERVIEW OF NON-WOVEN FILTER MEDIA USED IN INDUSTRIAL LIQUID FILTRATION CARTRIDGES

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Pleated cartridge filters are one of the most common forms of liquid solids filtration technologies used in fluid processing today. Although cartridge filters have been used in process systems for many decades, cartridge technology is continually evolving to adapt to the ever-changing needs of the industrial fluid processing industry. The industry is demanding finer filtration, using more aggressive chemicals at broader temperature ranges, and filter life requirements are increasing.

Cartridges are made up of many components and each one of these components must be compatible with the fluid at operating temperature and must be able to perform under the process conditions throughout the life of the cartridge and beyond, in some cases. As the most critical component to providing the filtration efficiency, the ability of the media to withstand these harsh environments for extended periods of time is crucial to the cartridge filter's performance in the process. Therefore, the development of new non-woven technology is essential to meeting the needs of the industrial fluid process industry.

This presentation will provide an overview of non-woven media and configurations used in industrial liquid cartridges as well as cover some applications, challenges, and possible opportunities for development.