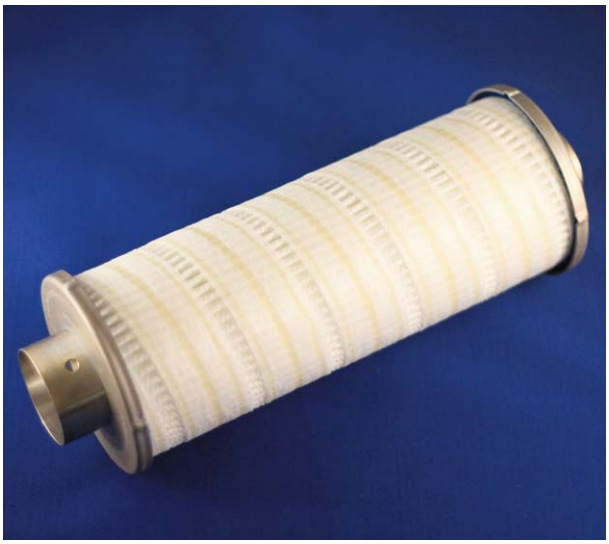
Pall Corporation

Pall Ultipleat®
Filter Elements for Aerospace

Ultipleat filter elements feature a laid-over pleat geometry which offers improved performance and a reduction in filtration costs.

- Reduced weight
- Reduced space envelope (with same performance)
- Increased filter element service life or
- Improved filtration with no service life reduction

The optimized Ultipleat filter element design is used in liquid filtration, including lube, transmission, hydraulic and fuel applications.

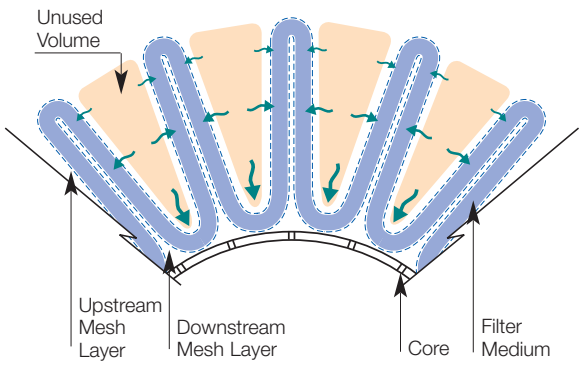


Ultipleat filter element

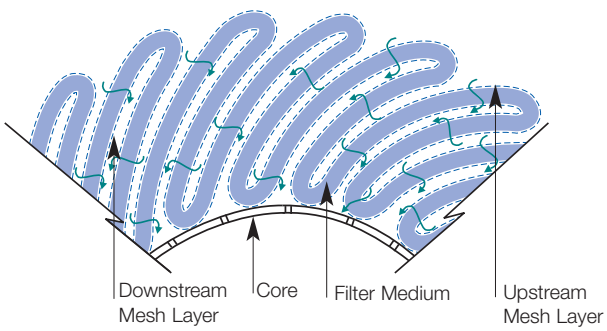
Feature	Benefit
• Laid over pleat geometry: significantly increased filtration area and uniform flow distribution (compared to traditional fan pleat)	- Extended filter element service life (same space envelope) or - Smaller space envelope and reduced weight
• High strength construction	- Consistent performance throughout filter element service life
• Size reduction (optional)	- Reduced filter element and assembly weight with similar service life and efficiency

Avoid Unused Volume

Conventional fan-pleat filter element



Ultipleat filter element



The laid-over pleat geometry of Ultipleat filter elements maximizes available filter area and ensures uniform flow distribution through the filter element.

Uniform Flow Distribution

The pleats of Ultipleat filter elements are designed to support each other along the entire length of the pleat. The total flow resistance is similar, regardless of where along the pleat the flow passes through the medium. This creates a uniform flow velocity through the filter element and, therefore, uniform build-up of dirt within the filtration medium. The result is greater dirt holding capacity and longer filter element service life.

Longer Service Life or Finer Filtration ...Your Choice

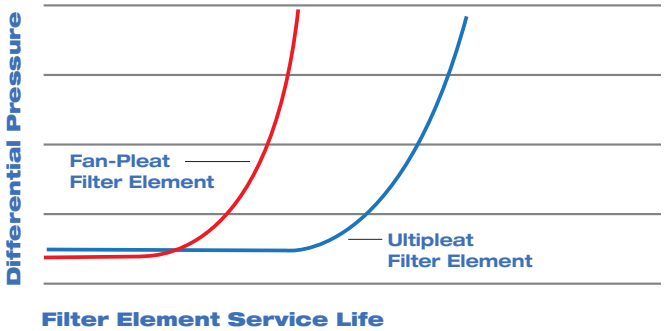
The increased filtration area due to the laid-over pleat construction, combined with the uniform flow distribution, leads to a significant improvement in filter element service life compared to a fan pleat construction in the same space envelope.

Alternatively, customers can choose to have a finer filter and still obtain the same filter element service life as a fan-pleat design in the same space envelope

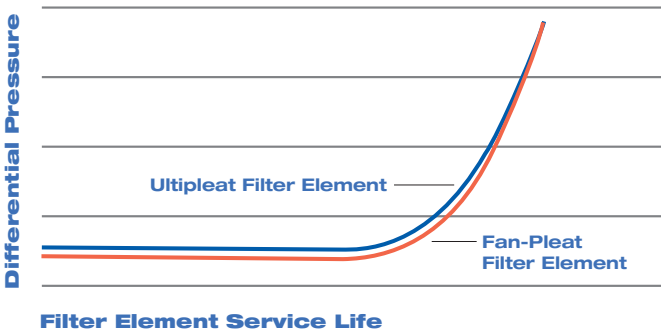
Reverse Flow (In-to-out Flow) Ultipleat Filters ...Ideal for New Applications

The Ultipleat filter pack can be designed for flow in either flow direction, outside-to-inside, forward flow or inside-to-outside, reverse flow. In the reverse flow configuration (in-to-out flow path), the captured contaminants are retained within the element during filter change out. In addition, the traditional forward flow support core is eliminated, and the filter bowl acts as the element's support core. This further reduces element weight and minimizes waste.

Service Life of Fan-Pleat vs. Ultipleat Filter Elements



This figure illustrates how an Ultipleat filter element can achieve longer service life compared to fan-pleat filter element with a similar envelope.



This figure illustrates how an Ultipleat filter element with a finer micron rating can achieve equivalent service life compared to a fan-pleat filter element with a similar envelope.

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Because of technological developments related to the products, systems, and/or services described herein, the data and procedures are subject to change without notice. Please consult your Pall representative or visit www.pall.com to verify that this information remains valid. Products in this document may be covered by one or more of the following patent numbers: EP 470,485; US 5,252,207; US 5,552,048.

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