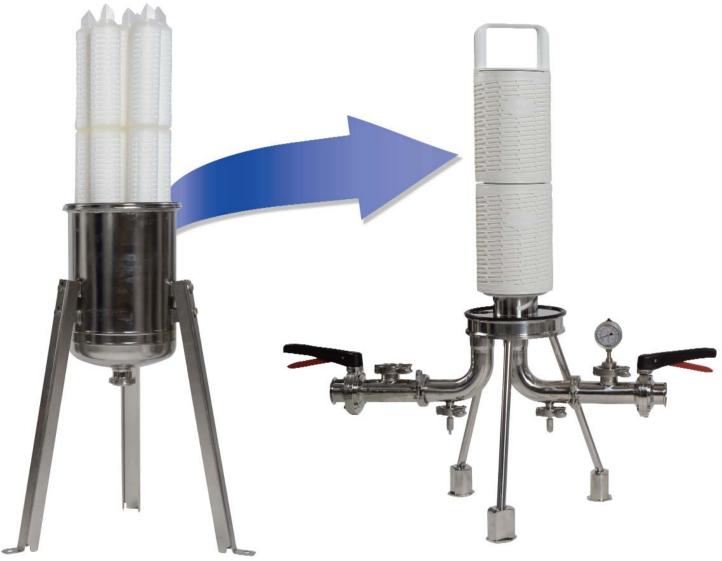


# **The Imperium™ Platform**

A Fresh Approach to Microfiltration



For Food & Beverage producers who truly value the importance of product quality, process efficiency and continuous improvement.



## **Imperium Microbial Stabilization Filter**

Protecting Taste and Quality with a Fresh Approach to Microfiltration

#### Serving the Food and Beverage Industry

For the microbial stabilization of wine, cider, beer and alcohol-free beverages, as the final filtration step prior to packaging.

- Up to 30% Reduction in Operating Costs 10 m<sup>2</sup> filtration area with new Supor<sup>®</sup> PES membrane
- Reduced Risk of Product Contamination Imperium integrity test approach and 88% reduction in material junction points

### Complete Process Flexibility

Modular housing configuration





#### Up to 30% Reduction in Operating Costs

In a challenging environment where Food & Beverage producers are continually driving to improve profitability, the Imperium MSB Filter can deliver up to 30% reduction in operating costs. Its patent pending geometry, together with Laid Over Long Pleat (LOLP) technology, allows utilization of 10 m<sup>2</sup> Effective Filtration Area (EFA) in one cartridge, replacing up to 6 x 30" standard filter cartridges with just 1 x Imperium MSB Filter. Pall's proprietary, newly developed asymmetric Supor® PES membrane provides reliable, market specific microbial retention with excellent throughput. Regeneration is possible with hot water, enzymes and chemicals, further improving service lifetime and costs.

#### **Reduced Risk of Product Contamination**

Despite the need to reduce costs, legislation, standards and consumer awareness with respect to product quality and safety are becoming increasingly stringent. Food & Beverage manufacturers must ensure their product is free from spoilage and pathogenic organisms to protect both the consumer and their brand. Reducing the risk of product contamination at the final filtration step prior to packaging is therefore an important area of focus. Common areas of filter failure are at points where materials are joined together in a manufacturing operation. These are called material junction points. The high area design of the Imperium MSB Filter reduces material junction points by 88% as compared to standard filter cartridges. The Imperium integrity test approach gives improved sensitivity and reduced risk of a false pass result which could lead to undetected microbial penetration. The retention performance of the product has been tested against microorganisms that are relevant to beer, wine, cider and bottled water production processes. This gives assurance of retention to the organisms that Food & Beverage producers are truly concerned about. The Imperium Housing design is also approved to 3A hygienic standards, minimizing build-up of biofilm and particulate and ensuring good clean-ability, reducing the risk of product contamination.

#### **Complete Process Flexibility**

The final filtration installation has an important role to play in the end user's overall production process, as the final processing step prior to packaging. Flexibility around the final filtration installation is therefore important to ensure that production quality, cost and schedule demands are met, in varying circumstances. The modular design of the Imperium Housing configuration allows parallel or duplex operation. With each filter contained in a separate housing and multi-size installations available through the use of manifolds, the end user has complete process flexibility. Continuous operation can be achieved, as individual filters or filter banks are isolated for CIP, SIP, integrity testing, maintenance, blockage or integrity testing, whilst the remaining filters continue in production. In addition, integrity testing can be performed on multiple housings together or individually, allowing identification of an integrity test failure filter without removing every filter and having to re-sanitize. This can save the Food & Beverage producer considerable downtime and costs. The Imperium Tri-Cam interface enables quick, simple and error proof filter installation, minimizing the potential for downtime as a result of time consuming or incorrect filter installation. Imperium allows simple, low cost expansion, in line with your future success.



Easily expandable in line with future capacity increase

Reduced risk of product contamination

Minimal process downtime

Flexibility of continuous operation

3A certified – hygienic design



Reliable retention to market specific microorganisms

### Compliant

to global food contact legislation

Significantly improved throughput

Simple, quick and error proof filter installation

Low capital investment cost



#### The Imperium Transition

The PALL SLS Global Technical Support team of global Food & Beverage application, scientific and engineering experts are committed to supporting manufacturers before, during and after the transition to Imperium. SLS will provide the information, data and support required to ensure Imperium is the right product for the process. During start-up and throughout Imperium use, Pall will help producers manage and deal with any risks or issues that arise. Your success is ours.

#### **Total Process Support**

The performance of a beverage production process is dependent on much more than a single filtration product. Pall Food & Beverage SLS Global Technical Support is available to work with end users on wider process optimization. Through consultations, process surveys, piloting work and training, Pall will help end users meet their goals around product quality, process efficiency and continuous improvement.

#### **Complimentary Product Portfolio**

The Pall Food & Beverage product portfolio is designed to bring improvement to various applications in the process, through an approach inspired by HACCP. Pall's diverse product range supports producers in improving quality, economy and efficiency.



#### Committed to Food & Beverage

In a time where filtration suppliers are increasingly concentrating on other markets, Pall is proud to remain fully committed to the food and beverage industry. This is reflected through Pall's continued focus on research and development, investing in the future success of food and beverage manufacturers. Knowledge of this commitment gives producers security of future supply and support, as well as the promise of continuous improvement in the products Pall delivers.



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Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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