

# PROCESS FILTRATION MODULAR SKID

System Engineered Solutions



#### **MAIN FEATURES & BENEFITS**

- Modular design to easily and flexibly adapt to your process needs
- Fully equipped with pre-mounted components for seamless integration into your production processes
- Hygienic design adheres to stringent sanitary standards
- Versatile applications within the Food & Beverage industries
- Choice of filtration options including Donaldson's premium LifeTec™ liquid filter elements to avoid the need for separate systems

# PRODUCT DESCRIPTION

Donaldson's Modular Skids are designed for point-of-use filtration of process and ingredient liquids to meet the filtration requirements of the food and beverage industry. A Modular Skid consists of one or more filtration stages, ranging from pre-filtration to final filtration.

# **Pre-mounted components & complete fittings**

The Skids come fully equipped with all necessary components featuring four valves, two pressure gauges, piping and a trolley for a quick and hassle-free installation, thus saving valuable time and efforts. With all necessary fittings included, this comprehensive package eliminates the need for additional purchases and allows for a seamless filtration process.

#### Sanitary design

Hygiene regulations in the food and beverage industry are particularly strict and are designed to prevent microbiological contamination during production processes. Our system is designed with hygiene in mind, adhering to stringent sanitary standards.

# Modular design

Offering the flexibility to add multiple steps while maintaining the same layout, the Skids offer scalability and adaptability to

evolving production needs, enabling you to expand and modify your filtration process effortlessly.

#### Compact design & production flexibility

The compact design of the Modular Skids allows them to be easily placed in any location within your production facility. This flexibility gives you the freedom to optimize your workflow and integrate our system seamlessly into your existing processes.

# **INDUSTRIES**







Dairy



Breweries



Wineries



Distilleries



# Comprehensive filtration options

Thanks to the modular design you can combine our premium LifeTec™ filter cartridges for sterile-, pre- and final filtration, bag filters and lenticular filters, providing a diverse range of filtration options. This versatility ensures that you can achieve the desired filtration quality for different applications without the need for separate systems.

# **Optional features**

Our system comes standard with tri-clamp connections, ensuring sanitary and secure connections with the possibility to accommodate other connection types to suit specific requirements, even if they are not sanitary. In addition we offer optional features such as pumps, CIP (Clean-in-Place) systems, and dosing stations to allow for further customization and optimization of your filtration operations.

# **APPLICATIONS**

- Clarification and sterilization of all types of water
- Clarification and sterile filtration of fermented beverages (beer)
- Clarification and final filtration of beverages
- Cold stabilization of beer
- Wine clarification and sterilization
- Spirit clarification

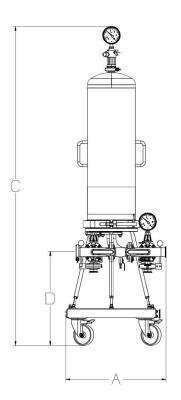
# **MATERIAL COMPLIANCE**

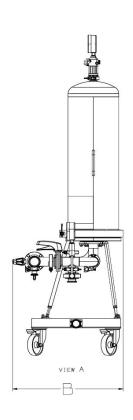
All components meet the EU requirements for direct food contact use in accordance with EC/1935/2004 and subsequent amendments.

All components meet the US requirements for food contact use in accordance with Code of Federal Regulations (CFR) Title 21.









Model	Dim A	Dim B	Dim C	Dim D
PF-MS 0130	17 in	21 in	69 in	22 in
PF-MS 0330	18 in	21 in	70 in	22 in
PF-MS 0530	21 in	23 in	71 in	22 in
PF-MS 0830	22 in	23 in	71 in	21 in
PF-MS 1230	28 in	23 in	71 in	21 in
L-BH-MS Size 1	22 in	21 in	62 in	22 in
L-BH-MS Size 2	22 in	21 in	75 in	22 in



PROCESS FILTRATION MODULAR SKID

Model	PF-MS 0130	PF-MS 0330	PF-MS 0530	PF-MS 0830	PF-MS 1230
Stages of filtration	1-4				
Number of filter elements per housing	1	3	5	8	12
Size of filter element [inch]	30 standard (10, 20 and 40 upon request)				
Inlet/outlet size, tri-clamp ASME-BPE	DN40 (1.5 in)	DN40 (1.5 in)	DN50 (2.0 in)	DN50 (2.0 in)	DN65 (2.5 in)
Design temperature	Minimum -10 °C (14 °F) - Maximum 150 °C (302 °F)				
Vessel volume [I]	6.6	17.8	39	49.8	77
Performance with water [hl/h]	Up to 240				
Filter element range [µm]	LifeTec filter elements graded sterile, absolute and nominal 0.2, 0.45, 0.6, 0.8, 1, 2.4, 5, 10				

Model	L-BH-MS Size 1		L-BH-MS Size 2		
Number of bags / Bag size [inch]	1 bag / 7 x 16.5		1 bag / 7 x 32		
Bag filtration surface [m2]	0.25		0.5		
Bag filters material and pore range [µm]	Polypropylene 1- 100, Polyester 1- 200, Nylon 25- 1200				
Performance with water [hl/h]	9 - 35				
Inlet /outlet size, tri-clamp ASME-BPE	DN40 (1.5 in)	DN50 (2.0 in)	DN40 (1.5 in)	DN50 (2.0 in)	
Vessel volume [I]	23		38		

General Information		
Maximum operating pressure	10 bar at temperature -10 °C (14 °F) - Maximum 150 °C (302 °F)	
Components	Sanitary stainless steel butterfly valves from INOXPA     Sanitary pressure gauges from ASHCROFT     Optional sanitary centrifugal pump	
Internal surface finish [Ra]	< 0,8 μm	
Materials	<ul> <li>Housings and all product contact surfaces available in Stainless Steel EN 1.4404 (AISI 316L) or EN 1.4301 (AISI 304)</li> <li>Seals made of Silicone and PTFE</li> </ul>	
Standard configuration	Filter housing, 2 drains, 4 valves, 2 pressure gauges, set of heavy-duty wheels	
Options	Variable number of filter stages, Booster pump for perfect economical use of the membranes, Integrity testing	



# donaldson.com/process

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# **Contact us**



Important Notice: Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.