



**STREAM TEX**

Liquid Filtration Solutions



**S E F A R**  
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# SEFAR TRANSFORMS NEEDS INTO SOLUTIONS.

## STREAM-TEX Liquid Filtration Solutions Global Experience with Local Manufacturing

Sefar is the global leader in manufacturing customer-tailored solutions in filtration and separation, for industrial applications.

Through our filtration knowledge and our profound technical understanding of industrial applications, Sefar Oceania is able to offer innovative filtration solutions with a high level of customisation options.

We are dedicated in our offering of custom designed industrial filtration solutions, to minimize downtime in continuous or batch operations system and to maximize efficiency and effectiveness of customers processes. We support our customers through strong technical knowledge based on innovation, quality and local manufacturing, leveraging on the Total Cost of Ownership approach.

Sefar Oceania has developed a unique range of high quality, liquid filtration solutions, for various applications. STREAM TEX is the Sefar liquid filtration solution used within the solid - liquid separation process and includes a complete range of filter vessels, filter bags and cartridges in different configurations and sizes. We provide filtration solutions for a wide range of industries such as:

- Food
- Chemicals
- Life Science
- Environmental
- Minerals

### Australia and New Zealand local Manufacturing

Our local Australia and New Zealand manufacturing plants, allow us to offer tailor-made solutions for a wide range of applications, as well as custom made designs.

During the production we assure strict product quality & reliability, working on a strict monitoring and controlling of the production processes. We also custom make labels, colour coding or other designs to assist the customers quality requirements, ensuring the right filter solution is used for each process step.

Our facilities are regulatory audited from competent authorities to guarantee the best quality management system.

- Custom made designs
- Consistent product quality
- Application specific modifications
- Quality Certification ISO 9001:2005

Our research and development engineers assess the processing requirements of our customers in order to provide accurate and efficient filtration systems, even for unusual conditions and circumstances.



# Filter Bag design - Poly Welded Construction and Multi-Seal Collar

## Poly Welded Construction

Poly welded filter bags hold a distinct advantage over all types of needle-sewn bags. The welded seams completely eliminates the possibility of unfiltered liquid bypass occurring due to needle holes. This results in a tighter seam and higher bag strength, improved filtration efficiencies, and improved product yields.

In addition, the ultrasonically welded seams of our poly welded filter bags provide a fibre-free finish and eliminate unwanted fiber migration. Since the welded bags are not made using any sewing thread, the possibility of silicone contamination from this source is also removed.

### Features:

- No needle holes
- No potential contamination caused by loose threads of fibres
- Precision cutting of the fabric edges
- Maintain same efficiency as filter media
- Increased strength of liquid filter bag



Sewn Filter Bag

Welded Filter Bag

## Multi- Seal Collar

The top, together with the Multi-Seal Collar, creates a hermetic seal within a filter housing to prevent liquid bypass and produce clearer filtrates.

The patented Multi-Seal Collar fits securely over the lip of the support basket, eliminating the potential bypass when using ordinary steel ring bags.

To facilitate bag removal, handles are built into the Multi-Seal Collar. They provide a stable grip to help prevent spillage during bag changeover.

### Features:

- Molded plastic with built-in handle makes installation and disposal of bags faster, cleaner and less expensive
- Easy to install: just drop into housing and push down
- Smooth plastic design prevent build-up of contaminants around the collar
- Collar is sewn or ultrasonically welded into place to ensure a tight seal and preventing potential bypass



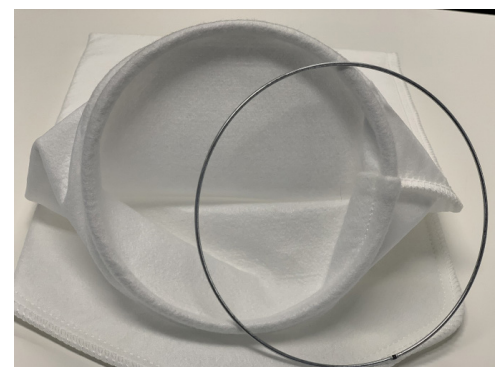
## Steel Ring Design

Filter bags with steel ring (available in galvanised or stainless steel) are used in older style vessels or for gravity fed applications.

Adapter Heads are available to suit a variety of pipe sizes and materials when used with steel ring design bags in gravity feed applications. Adapter heads are ideal for applications where vessels are impractical, see page 32 for further details.

### Features:

- Galvanized steel (stainless steel option)
- Sewn into the top of the bag
- Optional: Cotton handle is available for filters bags with steel rings



# Filter Bag Selection - Chemical Compatibility & Fabric Specifications

## Chemical Compatibility:

Fabric	Cotton	Polyester	Nylon	Polypropylene	316 SS
Weak Acids	Poor	Very Good	Fair	Excellent	Very Good
Strong Acids	Poor	Good	Poor	Excellent	Very Good
Weak Alkali	Excellent	Good	Excellent	Excellent	Very Good
Strong Alkali	Excellent	Poor	Excellent	Excellent	Very Good
Solvent	Good	Good	Good	Fair	Very Good
Temperature °C	90 - 115	130 - 150	135 - 160	90 - 105	450

Thermal and chemical resistance data presented in this brochure is a guide only. Factors such as duration of filtration, degree of concentration of a substance in the filter media, fluid and temperature should also be considered.

## Filter Fabric Qualities and Suitability:

Fabric	Cotton	Polyester	Nylon	Polypropylene	316 SS
Specific Gravity	1.55	1.38	1.14	0.9	0.798
Tensile Strength	44-109	64-124	58-128	50-85	290-580
Abrasion and Flex	Fair	Very Good	Excellent	Very Good	Excellent



Total suspended solids (TSS) conversion Table

PPM	%	g per litre	LBS/1000 Gal
10000	1%	9.586	80
8000	0.8000%	8.388	70
6000	0.6000%	5.991	50
4000	0.4000%	4.194	35
2000	0.2000%	1.797	15
1000	0.1000%	1.078	9
800	0.0800%	0.779	6.5
600	0.0600%	0.659	5.5
400	0.0400%	0.419	3.5
200	0.0200%	0.210	1.75
100	0.0100%	0.102	0.85
80	0.0080%	0.078	0.65
60	0.0060%	0.060	0.5
40	0.0040%	0.042	0.35
20	0.0020%	0.021	0.175
10	0.0010%	0.010	0.08
8	0.0008%	0.008	0.065
6	0.0006%	0.007	0.055
4	0.0004%	0.004	0.035
2	0.0002%	0.002	0.0175
1	0.0001%	-	0

# Filter Bag Selection - Moving from a nominal to an absolute rating

The chart below can assist you in the selection of the right type of filter bags comparing nominal vs absolute rated products: If you would like to move from nominal rating to absolute rating, you can follow the chart shown below.

eg.: if you are working with a:

PENG or PONG 1 micron filter bag, it is equal an absolute 50 micron CHF element at 99% filtration efficiency.

Filtration Efficiency - Comparison Chart

Comparative Filtration Efficiency			Filtration Media Type and Respective Filtration Efficiency Rating				
Micron Rating			CHF	NMO	POMF	PENG	PONG
Nominal	@95%	@99%	Absolute @99%	Absolute @99%	Absolute @95%	Nominal	Nominal
0.1	0.2	0.5	CHF .5				
0.2	0.3	1	CHF 1				
0.2	0.3	2	CHF 2				
0.2	0.5	3	CHF 3				
0.3	1	5	CHF 5	NMO 5	POMF 1		
0.4	2	7			POMF 2		
0.5	3	8					
0.8	5	10	CHF 10	NMO 10	POMF 5		
0.9	10	20	CHF 20	NMO 20	POMF 10		
1	15	25		NMO 25			
	15	35		NMO 35			
1	20	40					
1	25	50	CHF 50	NMO50	POMF 25	PENG 1	PONG 1
3	35	60					
3	40	70	CHF 70				
4	45	80					
5	50	90			POMF 50	PENG 5	PONG 5
10	60	100	CHF 100	NMO100		PENG 10	PONG 10
15	70	110					
20	80	115					
25	90	120	CHF 120			PENG 25	PONG 25
50	100	150		NMO150		PENG 50	PONG 50
100	140	180				PENG 100	PONG 100
150	180	200		NMO200		PENG 150	
200	250	400		NMO400		PENG 200	
400	450	600		NMO600			

## Absolute Rating

Absolute rated filter bags are generally between 90% and 95% efficient and from 95% to 99.9% with cartridges so contrary to their name, are not absolute (100%).

For example, a 1 micron absolute rated filter bag will remove between 95% and 98% of contaminants particles sizing 1 micron or larger, under laboratory conditions.

They are not 100% efficient. For this reason we refer to this type of filter bag as "Absolute @95% efficiency" eg POMF filter bags.

When 99% efficiency is required within a vessel you can now use CHF range of elements, this combines the efficiencies of a filter cartridges with the benefits of a bag.

## Nominal Rating

Nominal micron ratings are average or general in nature.

Their efficiencies can fall anywhere between 50% and 95% with the norm being around 80% efficiency.

That is to say, a 1 micron nominally rated filter bag will remove approximately 80% of contaminants particles sizing 1 micron or larger, under laboratory conditions.

Eg PONG and PENG Bags.

# Filter Bag Selection - Size, Flow Rate, Dirt Holding Capacity & Change-outs

## Filter bags - Standard Size and features



Size	P1	P2	P3	P4	P5
Filter bag area in m <sup>2</sup>	0.19	0.45	0.05	0.1	0.19
Content, litre	7.9	17	1.5	2.5	7.9
Bag Dia. mm	178	178	102	102	152
Bag Length mm	419	813	229	381	559
To suit Vessel type	PVBS	PVBS, PVBT, PVBA, PVPP, PVBD	PVBS, PVBT	PVBS, PVBT	PVPP

## Flow rate and Dirt Holding Capacity of different filter bags materials

Type	Code	Material	Description	Flow Rates based on P2 bag		Dirt Holding Capacity
				Micron Size	Flow Rate	Grams
Mesh	NMO	Nylon	Absolute rated 10 up to 1000 µm No Fibre migration High Tensile Strength Surface Filtration	10 µm: 25 to 100 µm: 150 to 1000 µm:	380 l/min 475 l/min 565 l/min	0 g
Felt	PONG	Polypropylene	Nominal rated 1 up to 100 µm Glazed outside to inhibit fibre migration	1 & 3 µm:	300 l/min	150 g
	PENG	Polyester	Nominal Rated 1 up to 200 µm Glazed outside to inhibit fibre migration	5 to 200 µm:	450 l/min	150 g
Micro-Fibre	POMF	Polypropylene	Absolute rated 1 up to 50 µm at 95% Mesh outside to inhibit fibre migration	1A & 2A : 10A - 50A :	230 l/min 380 l/min	300 g
Pleated Micro-Fibre	CHF HIGH FLOW ELEMENTS	Polypropylene	Absolute rated 5 up to 120 µm @99% High dirt loading capacity Combined with high flow rates	0005, 001, 002, 003, 005, 010, 020, 050, 070, 100, 120 :	700 l/min	900 g

A higher dirt loading capacity indicates longer service life, eg less bag change-outs, longer on line filtration and a reduction in overall operating cost.

## Filter Bag Change-Out

It is recommended that a liquid filter bag be changed out when the differential pressure ( $\Delta P$ ) between the upstream and downstream sides reaches approximately 0.8 - 1.3 bar. Although this is a rule of thumb, other factors in your system may require earlier change-outs; however under no circumstances should the  $\Delta P$  be allowed to exceed 1.8 bar as it will compromise the filter bag integrity and potentially cause blow-out and bypass.

Pressure drop $\Delta P$	Comment
< 0.15 bar or 2.1 psi	Recommended clean pressure drop
0.8 - 1.3 bar or 11-19 psi	Recommended change out pressure drop
> 1.8 bar or 26 psi	Maximum change out pressure drop

# Markets Served - Common Applications



## Food and Beverage Industry

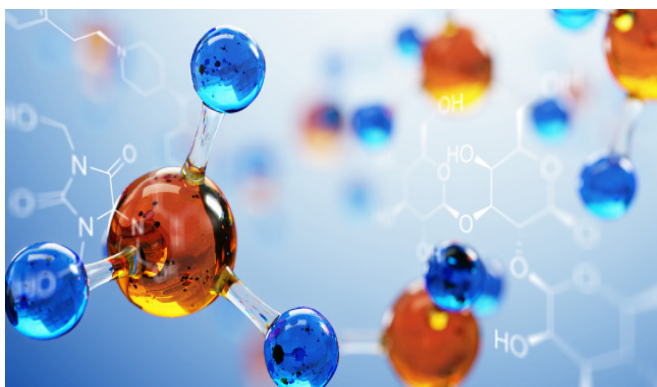
Filter solutions for security and final steps in the food/beverage production processes.

Bottled water, wine, beer, soft drinks, flavours, storage tank, reactor vents, corn syrup, edible oils, milk and distilled spirits.



## Pharmaceutical Industry

Small and large volume parenterals, ophthalmics, oral medications, recovery of active ingredients, active carbon purification and removal, filtration of hormones, vitamin extracts, gelatin, protein removal from plasma, filtration of saline solutions.



## Chemical/Petrochemical Industries

Monomers, polymers, glycols, herbicides and pesticides, catalysts, product polishing, photoresist, acids, bases, solvents, deep disposal well fluids.

Inks, adhesives, liquid detergents, dyestuffs, fabric coatings, paper coatings, electroplating solutions, metal etching solutions, automotive paints, can coatings, coil coatings, biodiesel, ad blue etc.





# Markets Served - Common Applications

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## Minerals Industry

General Process Industries such as: Plate Heat exchanges - Spray Nozzle protection - Mechanical seal water filtration - Pump protection.



## Environmental Industry

### Power Generation

Process water, drain waste water, prefiltes on cooling towers, heat exchanges.

### General Service

Rinse water, reverse osmosis system prefiltration, water - prior to and/or after demineralisation.



# Stream-Tex PONG AUSTRALIAN MADE

## Standard Type Polypropylene Needle Felt Filter Bags



The Stream-Tex PONG Polypropylene Felt Filter Bag is a nominal rated filter bag designed for applications with higher solid loadings. A robust, durable and reliable construction for all industrial markets.

The unique fully welded seam design, combined with the Multi Seal Collar, eliminates the risk of the bypass caused by stitching holes, and guaranteeing the best compression sealing mechanism during operation.

Unfiltered liquid bypass is eliminated by using the multi seal collar which is ultrasonically welded to the bags, allowing for perfect sealing.

Made from 100% polypropylene silicone free needle felt, with a glazed surface finish, the PONG filter bag inhibits fiber migration into the final product.

The most versatile and popular bag on the market, suitable for a wide range of applications.



### Features and Benefits

- Inside-Outside Flow Configuration, resulting in the capture of contaminants on the inside of the bag
- Five standard industrial sizes available
- Robust and reliable construction
- Fully welded design eliminates potential liquid bypass caused by needle holes
- Unique Multi Seal Collar for best compression sealing mechanism
- Silicone free needle felt
- Available in 100% Polypropylene, glazed finish eliminates fibre migration for clearer results
- FDA compliant material
- Australian made

### ORDERING INFORMATION

Bag Size	Ring Type	Material	Micron Rating $\mu\text{m}$ Nominal
P1 P2 P3 P4 P5	P = Multi Seal Collar S = Steel ring	PONG=  Polypropylene Felt, Glazed Finish	001 = 1 $\mu\text{m}$ 005 = 5 $\mu\text{m}$ 010 = 10 $\mu\text{m}$ 025 = 25 $\mu\text{m}$ 050 = 50 $\mu\text{m}$ 100 = 100 $\mu\text{m}$

Order example:

Size 1, rating 5  $\mu\text{m}$ , with standard Multi Seal collar in PONG material = P1P-PONG-005

Size 4, rating 100  $\mu\text{m}$ , with Special steel ring = P4S-PONG-100

#### Material and Construction

- Nominal Rating : 1 -100  $\mu\text{m}$
- 100% Polypropylene Needle Felt

#### Dimensions and performance

- Size: P1, P2, P3, P4, P5
- Maximum Recommended Flow Rate: 300 lpm-450 lpm (P2)
- Dirt holding capacity: 150 g
- FDA 21 CFR 174.5 Compliant Materials

#### Operating Conditions

- Max Temperature 90-105 °C
- Filter bag area P2 - 0,45 m<sup>2</sup>
- Recommended Change out Pressure Drop 0.8 - 1.3 bar @ 20°C
- Max Change out Pressure Drop 1.8 bar @ 20°C

# Stream-Tex PENG AUSTRALIAN MADE

## Standard Type Polyester Needle Felt Filter Bags



The Stream-Tex PENG Polyester Felt Filter Bag is a nominal rated filter bag designed for applications with higher solid loadings. A robust, durable and reliable construction for all industrial markets.

The unique fully welded seam design, combined with the Multi Seal Collar, eliminates the risk of the bypass caused by stitching holes, and guaranteeing the best compression sealing mechanism during operation.

Unfiltered liquid bypass is eliminated by using the Multi seal collar which is ultrasonically welded to the bags, allowing for perfect sealing.

Made from 100% polyester silicone free needle felt, with a glazed surface finish, the PENG filter bag inhibits fiber migration into the final product.

The most versatile and popular bag on the market suitable for a wide range of applications.



### Features and Benefits

- Inside-Outside Flow Configuration, resulting in the capture of contaminants on the inside of the bag
- Five standard industrial sizes available
- Robust and reliable construction
- Fully welded design eliminates potential liquid bypass caused by needle holes
- Unique Multi Seal collar design for best compression sealing mechanism
- Silicone free needle felt
- Max Temperature 130-150 °C
- FDA compliant material
- Australian made

### ORDERING INFORMATION

Bag Size	Ring Type	Material	Micron Rating $\mu\text{m}$ Nominal
P1 P2 P3 P4 P5	P = Multi Seal Collar S = Steel ring	PENG= Polyester Felt	001 = 1 $\mu\text{m}$ 005 = 5 $\mu\text{m}$ 010 = 10 $\mu\text{m}$ 025 = 25 $\mu\text{m}$ 050 = 50 $\mu\text{m}$ 100 = 100 $\mu\text{m}$ 150 = 150 $\mu\text{m}$ 200 = 200 $\mu\text{m}$

Order example:

Size 1, rating 5  $\mu\text{m}$ , with standard Multi Seal collar in PENG material = P1P-PENG-005

Size 4, rating 100  $\mu\text{m}$ , with special steel ring = P4S-PENG-100

Material and Construction	Dimensions and performance	Operating Conditions
<ul style="list-style-type: none"> <li>• Nominal Rating : 1-200 <math>\mu\text{m}</math></li> <li>• 100% Polyester Needle Felt</li> </ul>	<ul style="list-style-type: none"> <li>• Size: P1, P2, P3, P4, P5</li> <li>• Maximum Recommended Flow Rate: 300 lpm-450 lpm (P2)</li> <li>• Dirt holding capacity: 150 g</li> <li>• FDA 21 CFR 174.5 Compliant Materials</li> </ul>	<ul style="list-style-type: none"> <li>• Max Temperature 130-150 °C</li> <li>• Filter bag area P2 - 0,45m<sup>2</sup></li> <li>• Recommended Change out Pressure Drop 0.8 - 1.3 bar @ 20°C</li> <li>• Max Change out Pressure Drop 1.8 bar @ 20°C</li> </ul>

# Stream-Tex NMO **AUSTRALIAN MADE** Nylon Monofilament Open Mesh Filter Bags



The Stream-Tex NMO Nylon Monofilament Mesh Filter Bags, offering an absolute filtration efficiency of @99%, are made using woven monofilament mesh. Each thread is a single filament, providing excellent strength, with no fibre migration, and avoiding contamination of the final product.

The NMO range of liquid filter bags is providing a consistent pore size to capture undesirable solid particles from the incoming fluid, at the selected micron bag filter rating. The filter bags are typically used to filter paints, solvents, hydrocarbons, and in other solids-liquid applications where more porous filters are needed.

The mesh is designed with evenly spaced apertures, featuring a constant filtration efficiency with predictable and repeatable performance. The monofilament yarn used in the mesh is resistant to a broad range of chemicals as well as being extremely abrasion resistant, unaffected by metal fatigue or corrosion, with no loose fibres and high tensile strength.

NMO Nylon Monofilament Mesh filter bags are designed for applications where 10 to 1000 micron filtration at a flow rate of 565 l/min (P2 size) is required.

## Features and Benefits

- Inside-Outside Flow Configuration, resulting in the capture of contaminants on the inside of the bag
- Used for exact separation - classification of solids to capture undesirable solid particles at the specific micro rating
- Monofilament fibre mesh and high tensile strength construction prevents the contamination of the downstream fluid
- Excellent dimensionally stable material will not shift or deform under pressure
- Max temperature is 135 -160 °C
- Extremely resistant to a broad range of chemical solvents
- Mostly used as a Security Filter
- FDA compliant material
- Australia made



## ORDERING INFORMATION

Bag Size	Ring Type	Material	Micron Rating $\mu\text{m}$ Absolute @99%
P1 P2 P3 P4 P5	P = Multi Seal Collar S = Steel ring	NMO=  Nylon Monofilament Mesh	010, 020, 025, 035, 050, 055, 065, 075, 100, 125, 150, 200, 250, 300, 350, 400, 500, 600, 700, 800, 1000

Order example:

Size 1, rating 25  $\mu\text{m}$  with standard Multi Seal Collar in NMO material = P1P-NMO-025

Size 4, rating 400  $\mu\text{m}$  with Special steel ring P4S-NMO-400

### Material and Construction

- Absolute Rating @99% : 10 - 1000  $\mu\text{m}$
- 100% Nylon Open Mesh

### Dimensions and performance (P2 size)

- Size: P1, P2, P3, P4, P5
- Maximum Recommended Flow Rate: 380 lpm-565 lpm (P2)
- FDA 21 CFR 174.5 Compliant Materials

### Operating Conditions

- Max Temperature 135-160 °C
- Filter bag area P2 - 0,45m<sup>2</sup>
- Recommended Change out Pressure Drop 0.8 - 1.3 bar @ 20°C
- Max Change out Pressure Drop 1.8 bar @ 20°C

# Stream-Tex POMF

## Polypropylene Microfibre Filter Bags

The POMF series of high performance bags are designed for your critical areas of filtration.

Contaminate removal efficiency at well over 95% make this one of our leading filters within the StreamTex range.

The media is effective in removing gelatinous contamination due to its unique structure. Filters particles throughout the depth of the media.

Wide range of applications with FDA compliant polypropylene media. Non foaming, no surfactant. Safe for all critical applications including Dairy, Pharmaceutical and high purity water production.



### Features and Benefits

- Inside-Outside Flow Configuration, resulting in the capture of contaminants on the inside of the bag
- Precise particle retention (>95%)
- Absolute micro rating to ensure consistent repeatable performance
- Multilayer graded density structure, from coarse to fine particle filtration, provides a significant increase in contaminant holding capacity, resulting in a longer filter service life and less filter bag change-outs
- Made from 100% pure polypropylene microfibrils which contain no resin, lubricants, bonding adhesive, silicone or anti static fibres
- Provides a wide process fluid compatibility with acid and alkali solvent
- Long service life of 2-3 times of a standard felt bag
- Lower total cost of filtration
- FDA compliant material

### ORDERING INFORMATION

Bag Size	Ring Type	Material	Micron Rating $\mu\text{m}$ Absolute @95%
P1 P2	P = Multi Seal Collar	POMF=  Microfibre Polypropylene	1A = 1 $\mu\text{m}$ 2A = 2 $\mu\text{m}$ 5A = 5 $\mu\text{m}$ 10A = 10 $\mu\text{m}$ 25A = 25 $\mu\text{m}$ 50A = 50 $\mu\text{m}$

Order example:

Size 2, rating 10  $\mu\text{m}$ , with standard Multi Seal Collar in POMF material = P2P-POMF-10A

Material and Construction	Dimensions and performance (P2 size)	Operating Conditions
<ul style="list-style-type: none"> <li>• Absolute Rating @ 95%: 1 - 50 <math>\mu\text{m}</math></li> <li>• 100% Polypropylene Microfibre</li> </ul>	<ul style="list-style-type: none"> <li>• Size: P1, P2</li> <li>• Maximum Recommended Flow Rate: 230 lpm-380 lpm (P2)</li> <li>• Dirt holding capacity: 300 g</li> <li>• FDA 21 CFR 174.5 Compliant Materials</li> </ul>	<ul style="list-style-type: none"> <li>• Max Temperature 90-105 °C</li> <li>• Filter bag area P2 0,45 m<sup>2</sup></li> <li>• Recommended Change out Pressure Drop 0.8 - 1.3 bar @ 20°C</li> <li>• Max Change out Pressure Drop 1.8 bar @ 20°C</li> </ul>

# Stream-Tex CHF

## High Flow Pleated Filter Elements for bag filter vessels



The Stream-Tex CHF is the unique, absolute @99% efficiency rated, Polypropylene, Pleated Microfibre Membrane filter element, featuring an inside to outside flow pattern design, providing significantly increased service life and dirt holding capacity through the unique internal pleat design (Figure No 1). It combines the advantages of conventional filter bags and filter cartridges in one filter element.

The CHF is a large diameter, coreless, single open end, pleated cartridge, designed to reduce system investment and disposal costs via long service life.

It is able to replace from 10 to 20 standard P2 bags, saving cost of change out. You can upgrade your bag filter to an absolute high flow cartridge filter.

CHF High Flow Filter Element combines the performance advantages of cartridge filters with the ease use of bag filter systems. It offers a unique combination of benefits and unmatched economics.

The irrigation channel mesh design inside the pleats, provides a uniform distribution of the fluid and contaminants to the entire filtration surface of the filter element.

The pleated media increases the effective filtration area with high flow and long service life. Easily retrofit into existing size 2 bag housings.



Figure 1 - Irrigation Channel Mesh Design

### Features and Benefits

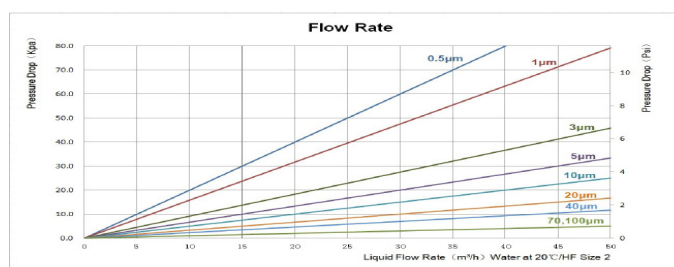
- Inside to outside filter design provides consistent filtrate quality, clean filter vessel, easy removal of contaminants
- High Surface area in a Pleated Micro Fibre Design provides more than double of the flow rate of standard P2 bags, longer service life, high dirt loading capacity for fewer filter change-outs
- Absolute @99% filtration efficiency rating
- Compact and space saving design that fits in most existing P2 filter vessels ideal for new systems, allows lower capital and installation cost
- FDA Compliant material

### ORDERING INFORMATION

Type of Filter	Bag size	Micron rating Absolute @99%
CHF	2 = 685mm	0005 = 0.5µm 001 = 1 µm 002 = 2 µm 003 = 3 µm 005 = 5 µm 010 = 10 µm 020 = 20 µm 050 = 50 µm 070 = 70 µm 100 = 100 µm 120 = 120 µm

Order example: Size 2, rating 5 µm = CHF-2-005

Performance Chart Flow Rate Size 2



### Applications:

Food & Beverage , Industrial DI Water, Chemical industry  
Paint and Coating, Micro-Electronic industry  
Petrochemical industry

Material and Construction	Dimensions and performance	Operating Conditions
<ul style="list-style-type: none"> <li>• Absolute Rating @ 99%: CHF 0,5 -120 µm</li> <li>• Media, Center Core, End Caps, Outer Sleeve: 100% Polypropylene</li> <li>• O-Ring: EPDM</li> </ul>	<ul style="list-style-type: none"> <li>• Outside Diameter: 6" (152 mm)</li> <li>• Length: 32" (634 mm)</li> <li>• Maximum Recommended Flow Rate: 700 lpm</li> <li>• Dirt holding capacity: 900 g</li> <li>• FDA 21 CFR 174.5 Compliant Materials</li> </ul>	<ul style="list-style-type: none"> <li>• Max. Operating Temperature: 80°C (CIP 90°C)</li> <li>• Recommended Change out Pressure Drop 2.4 bar @ 20°C</li> <li>• Max. Change out Pressure Drop : 3.4 bar @ 60°C</li> <li>• Fitting in both Side &amp; Top entry filter housing</li> </ul>

# Stream-Tex Cartridges

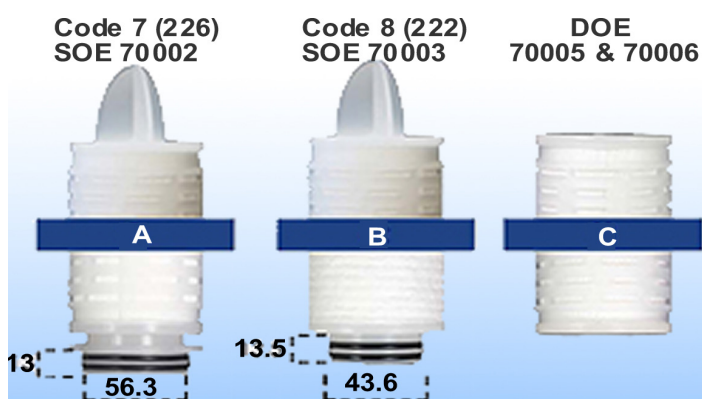
## Selection guide and End Cap Configuration Code and Dimensions

Sefar offers a wide range of cartridges from prefilters to the final filtration solution in various materials and configurations, for a wide variety of applications including: food and beverage, chemicals, paint and the filtration of acids and bases.

Cartridge filtration can also be an effective choice for pharmaceutical and ultra-pure water applications.

Sefar helps customers to identify the best liquid filtration solution in order to minimize process downtime, reduce or eliminate waste disposal costs, limit worker exposure to the process liquid, reduce maintenance time and expense, and improve product quality.

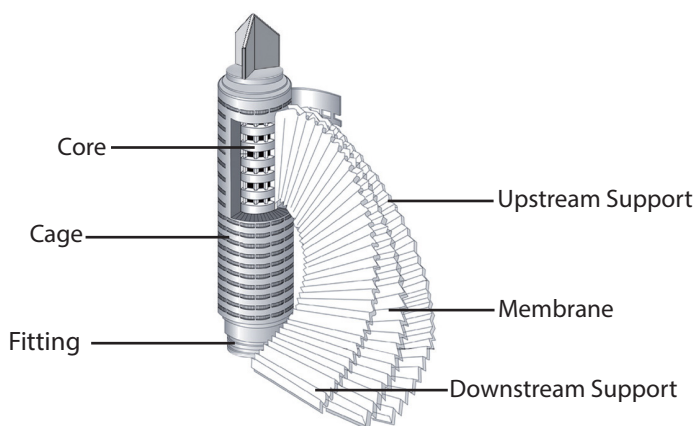
### End Fittings



**Type A**  
Single Open End  
Code 7 (226), 70002  
O-Ring Bayonet Loc  
one end and Fin other  
end

**Type B**  
Single Open End  
Code 8 (222), 70003  
O-Ring Bayonet Lock  
one end and Fin other  
end

**Type C**  
Double Open End  
with Gaskets  
= STANDARD



### Type A - SOE 226 Fin



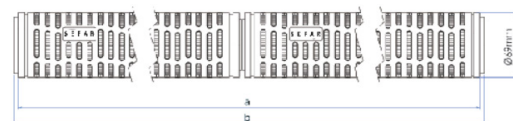
	10"	20"	30"	40"
a	240.0	490.0	740.0	990.0
b	250.0	500.0	750.0	1000.0
c	310.5	560.5	810.5	1050.5

### Type B - SOE 222 Extended/Fin



	10"	20"	30"	40"
a	242.0	492.0	742.0	992.0
b	260.0	510.0	760.0	1010.0
c	319.5	569.5	819.5	1069.5

### Type C - DOE



	10"	20"	30"	40"
a	242.0	492.0	742.0	992.0
b	250.0	500.0	750.0	1000.0

### Length

Imperial (")	Metric (mm)
9.75"	247.65 mm
10"	254 mm
20"	508 mm
30"	762 mm
40"	1,016 mm

# Stream-Tex CSW

## Polypropylene String Wound Filter Cartridges



The Stream-Tex CSW string wound filter cartridges are manufactured with structured open outer layers and tight inner layers to offer true depth filtration for high dirt holding capacity and extremely low media migration.

As a result of combining computer-aided design and state-of-the-art production processes we created a unique diamond-shaped depth filtration woven cone design. The tension and twist applied to the yarn provides depth filtration, providing high dirt holding capacity for and desired cleanliness of end product.

The main advantage of the string wound filter cartridge is its exceptionally high structural strength, therefore, it can withstand higher pressure and severe operating conditions.

The absence of binding substances allows a good chemical compatibility with any treated fluid and offers a high versatility of use in the industrial applications.



### Features and Benefits

- Polypropylene media for a wide range of chemical compatibility
- Low pressure drop, high dirt holding capacity and long service life
- Cost effective premium depth filtration
- Loose outer layers and tight inner layers offers effective depth filtration
- FDA compliant material

### ORDERING INFORMATION

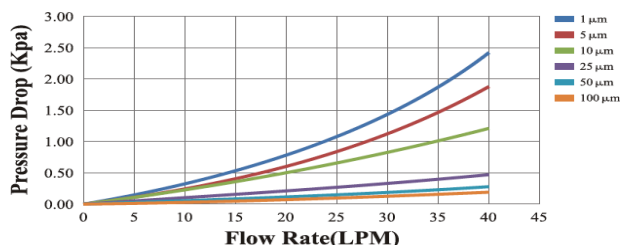
Type of Filter	Material	Micron rating	Length inch	End Fitting
CSWB	PP= PP media PP Core	001 = 1 µm	10 = 10"	A = SOE code 7* B = SOE code 8* C = DOE
		003 = 3 µm	20 = 20"	
		005 = 5 µm	30 = 30"	
		010 = 10 µm	40 = 40"	
		020 = 20 µm		
	PPS= PP Media SS Core	030 = 30 µm		
		050 = 50 µm		
		075 = 75 µm		
		100 = 100 µm		
		150 = 150 µm		

Order example:

CSWB, rating 50 µm, 10" long, DOE End fitting = CSWB-PP-050-10C

\*A and B end fitting available upon request

C end fitting = standard configuration



Applications:

- Prefilter for water filtration & purification
- Food and Beverage
- Microelectronics
- Chemical Industry
- Minerals Processing

#### Material and Construction

- 100% Polypropylene
- End cap: Polypropylene
- Gasket: Silicone, EPDM
- Core: PP, SS

#### Dimensions and performances

- Dimensions - OD: 63 mm; ID: 28 mm
- Length: 10", 20", 30", 40"
- Absolute Rating: 1 µm - 150 µm
- FDA 21 CFR regulations

#### Operating Conditions

- Max Temperature 80 °C
- Recommended Change out Pressure Drop 1.8 bar @ 20°C
- Max Change out Pressure Drop 2 bar @ 25 °C



# Stream-Tex CMB

## Polypropylene Meltblown Filter Cartridges



The Stream-Tex CMB Polypropylene meltblown filter cartridge is a rigid progressive depth filter construction resulting in higher contaminant holding capacity for fewer filter change outs and longer service life.

CMB has a progressive depth structure: the outer fibers are larger in diameter with less density and more porosity to minimize pressure drops and increasing dirt holding capacity. The inner fibers are extremely fine and compact to capture fine particles.

Grooved configuration provides an extended surface area and promotes longer service life. Made without adhesives, binders, surfactants or lubricants the Stream-Tex CMB guarantees a wide range of chemical compatibility for all industrial applications and operating conditions.



### Features and Benefits

- Deep groove surface highly extend the filtration surface area
- Formed by thermal bond without using ny binders and adhesive
- 100% pure polypropylene will not cause any pollution to water
- Three layers structure cartridge offers high dirt holding capacity, longer service life
- Wide chemical compatibility
- FDA compliant material

### ORDERING INFORMATION

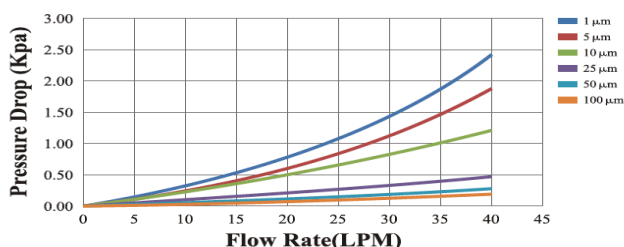
Type of Filter	Material	Micron rating	Length inch	End Fitting
CMBB	PP= (Polypropylene)	001 = 1 µm 003 = 3 µm 005 = 5 µm 010 = 10 µm 025 = 25 µm 050 = 50 µm 075 = 75 µm 100 = 100 µm 150 = 150 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40"	A = SOE code 7* B = SOE code 8* C = DOE

Order example:

CMBB, rating 25 µm, 20", DOE End fitting = CMBB-PP-025-20C

\*A and B end fitting available upon request

C end fitting = standard configuration



Applications:

- Food and Beverage
- Pharmaceutical
- Semiconductor
- Chemical Industry
- Mineral Processing
- Drinking water

#### Material and Costruction

- 100% Polypropylene
- End cap: Polypropylene
- Gasket: Silicone, EPDM
- Core/End Polypropylene

#### Dimensions and performance

- Dimension: (OD): 63mm (ID) 28mm
- Lenght: 10", 20", 30", 40"
- Absolute Rating : 1 µm-150 µm
- FDA 21 CFR regulations

#### Operating Conditions

- Max Operating Temperature 80 °C
- Recommended Change out Pressure Drop 1.8 bar @ 20°C
- Max Change out Pressure Drop 2 bar @ 25 °C

# Stream-Tex

## Specialty filter cartridges for various applications

### Stream-Tex CPL - Nylon 6 Pleated Filter Cartridges



The Stream-Tex Nylon membrane cartridge provides wide system compatibility and absolute rated filtration efficiency, yielding the cleanest possible process fluids in a variety of industrial applications. The naturally hydrophilic nylon membrane cartridges require no pre-wetting and or surfactant. Each cartridge module is also individually tested for integrity during manufacturing.

Type of Filter	Dia (mm)	Micron rating	Length inch	End Fitting	Gasket material	Connection Reinforcement
CPL	D=69	0.1 = 0.1 µm 0.22 = 0.22 µm 0.45 = 0.45 µm 0.65 = 0.65 µm 0.8 = 0.8 µm 1.2 = 1.2 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40"	A B C	S=Silicone E=EPDM V=Viton	S=316SS

### Stream-Tex CPL - Polypropylene Pleated Filter Cartridges



Stream-Tex CPL series Pleated Cartridges deliver high efficiency and consistent filtration for a wide range of critical liquid-solid separation applications.

The CPL series cartridge provides particle retention from 0.1 to 25 micron available in nominal or absolute rated cartridges.

Type of Filter	Dia (mm)	Micron rating	Length inch	End Fitting	Gasket material	Connection Reinforcement
CPL	D=69	0.1 = 0.1 µm 0.22 = 0.22 µm 0.45 = 0.45 µm 1 = 1 µm 3 = 3 µm 5 = 5 µm 10 = 10 µm 25 = 25 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40"	A B C	S=Silicone E=EPDM V=Viton	S=316SS

### Stream-Tex CME - PES Membrane Filter Cartridges



Stream-Tex CME absolute rated Hydrophilic Polyethersulfone membrane cartridges are designed specifically for process applications needing high flow and high particle retention characteristics due to the highly asymmetric pore structure of the membrane media. The highly porous asymmetric membrane ensures lower pressure drop and extended service life.

All cartridges are manufactured in a clean room environment using membrane material that has been challenged by 100% integrity test with 18 mega-ohm high purity DI water, and complies to FDA biological safety standards.

Type of Filter	Dia (mm)	Micron rating	Length inch	End Fitting	Gasket material	Connection Reinforcement
CME	D=69	0.1 = 0.1 µm 0.22 = 0.22 µm 0.45 = 0.45 µm 0.65 = 0.65 µm 0.8 = 0.8 µm 1.2 = 1.2 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40"	A B C	S=Silicone E=EPDM V=Viton	S=304SS

# Stream-Tex

## Specialty filter cartridges for various applications



### Stream-Tex CME - PTFE Membrane Filter Cartridges

The Stream-Tex naturally hydrophobic Polytetrafluoroethylene membrane media is manufactured under strict quality control measures that includes rigorous testing for rinse-up, shedding, flow and extractables levels to ensure CME cartridges exceed industry standards.

Type of Filter	Dia (mm)	Micron rating	Length inch	End Fitting	Gasket material	Connection Reinforcement
CME	D=69	0.1 = 0.1 µm 0.22 = 0.22 µm 0.45 = 0.45 µm 001= 1 µm 003 = 3 µm 005 = 5 µm 010 = 10 µm 025 = 25 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40"	A B C	S=Silicone E=EPDM V=Viton	S=316SS



### Stream-Tex CCB / CCF - Activated Carbon Filters Cartridges

Stream-Tex Activated Carbon cartridges are made of high adsorptive carbon powder and granular activated carbon, compressed during extrusion. This provides superior absorbability and filtration efficiency and offers stable pressure drop combined with long service time.

Activated Carbon cartridges offer an economical solution for your general water filtration needs and industrial process purposes

Type of Filter	Dia. mm	Micron rating	Length inch	End Fitting
CCB	D = 69 E = 115	0005 001 005 010	9.75" 10" 20" 30"	C

Type of Filter	Dia. mm	Micron rating	Length inch	End Fitting
CCF	D = 69 E = 115	001 005 010	9.75" 10" 20"	C



### Stream-Tex CPL / CSI - Pleated- and Sintered Stainless Steel Cartridges

The Stream-Tex pleated filter cartridges are made of stainless steel fibre web and stainless steel woven wire mesh. The Stream-Tex sintered porous metal filter cartridges are made from fine stainless steel powders sintered to form rugged high voids and fixed pore filters with high-temperature, pressure, and solvent resistance. These filter elements provide the advantage of high porosity, large filter area and high dirt holding capacity, that can be chemically cleaned or by ultrasonic cleaning method.

Type of Filter	Dia. mm	Micron rating	Length inch	End Fitting	Gasket material
CPL	D = 69	001 003 005 010	10" 20" 30" 40"	A B C	S = Silicone E = EPDM V = Viton

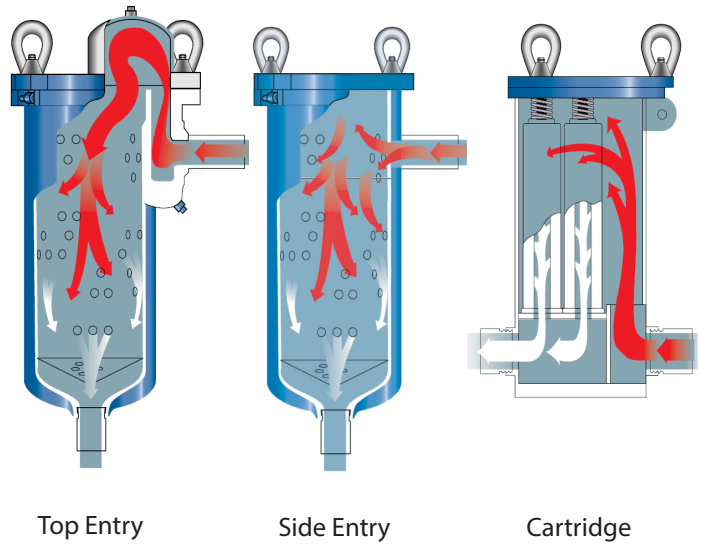
Type of Filter	Dia. mm	Micron rating	Length inch	End Fitting	Gasket material
CSI	D = 69	001 003 005 010	10" 20"	A B C	S = Silicone E = EPDM V = Viton

# Filter Vessel Selection








A full range of filter vessels from polypropylene to 304 or 316 stainless steel, industrial and sanitary vessels, are available from 10 to 20 bar, with both single and multi bags housings to suit every application. The housings have flanged or threaded port connections for ease of installation. Tri-clover and other fittings are available upon request. Please ask us for further information.

Vessel Type		Flow Rate l/min, by Filter Media Type			
No of bags per vessel	In-/Outlet size	POMF bags	PENG, PONG bags	NMO bags	High Flow Cartridge
1	2-3"	260	380	470	700
2	3-4"	520	760	940	1,400
3	4-5"	780	1,140	1,410	2,100
4	5-6"	1,040	1,520	1,880	2,800

In most filtration applications, fluid viscosities do not exceed 50 cps. Using the Flow Rates shown in the table per #2 Size Bag at 5 Micron as a guide, and using a specific gravity of 1 (Water) the suggested flow rates should result in a CLEAN Pressure Drop under 2 PSID.



## Filter Vessel Types

<p><b>PVPP</b> Corrosive Applications</p>	<p><b>PVBS</b> Side Entry</p>	<p><b>PVBT</b> Top Entry</p>	<p><b>PVBA</b> Top Entry / Easy bag change</p>
			
<p>Single bag design Steel Side entry vessels High Pressure and Temperature Flow rates from 300-650 l/min</p>	<p>Single bag design Steel Side entry vessels Cost-effective solution Flow rates from 225-700 l/min</p>	<p>Steel Top entry vessels Minimal headroom required Easy bag change-out Flow rate from 225-700 l/min</p>	<p>Based on our standard PVBT's 45° design for ease of bag change, reduces OH&amp;S issues Flow rate from 225-700 l/min</p>
<p><b>PVBM</b> Multi Bag</p>	<p><b>PVBD</b> Duplex</p>	<p><b>PVSC</b> Self Cleaning</p>	<p><b>Accessories</b></p>
			
<p>High flow steel vessel Most cost-effective solution Flow rate up to 8100 l/min</p>	<p>Duplex- Multi Bags or High Flow Elements design</p>	<p>Self cleaning filter No bags required 3 size available Flow rates from 50- 750 l/min</p>	<p>O ring, eye bolt set and tool, Bag Fixing Ring, Lid, Strainer Baskets, Pressure Gauge, Evacuation Float , Adaptor Heads, Legs.</p>

# Filter Vessels Selection - Specifications and Chemical Compatibility

## Selection Guide / Specifications

	Models	PVBS	PVBT	PVBA	PVBM	PVPP	PVSC	PVBD
	Series	Side Entry	Top Entry	45 Deg	Multi Bag	Poly	Self-Cleaning	Duplex Multi Bag
SPECIFICATIONS	Material	304/316	304/316	304/316	304/316	PP	304/316	304SS
	Temperature Range*	90-200 °C	90-200 °C	90-200 °C	90-200 °C	90-200°C	90-200 °C	90-200 °C
	Filter bag size	1, 2, 3, 4	1, 2	2	2	2, 5	n/a	2
	Number of bags / Cartridges	1	1	1	2 - 18	1	n/a	n/a
	Flow rates l/min	225 - 700	225 - 700	225 - 700	1400 - 8100	300 - 650	50 - 750	1400
	Inlet / Outlet size	2", 3"	2"	2", 3"	3" - 12"	2"	1.5"-3"	3"

\* The Temperature depends on the o-ring's material

## Filtration Grade

	Models	PVBS	PVBT	PVBA	PVBM	PVPP	PVSC	PVBD
FILTRATION GRADE	Coarse filtration > 500 um	✓	✓	✓	✓	✓	✓	✓
	Medium filtration > 25 um	✓	✓	✓	✓	✓	✓	✓
	Fine Filtration > 10 um	✓	✓	✓	✓	✓		✓
	Very Fine filtration < 10 um	✓	✓	✓	✓	✓		✓

## Filter Media - Chemical Compatibility

	Models	PVBS	PVBT	PVBA	PVBM	PVPP	PVSC	PVBD
CHEMICAL COMPATIBILITY	Acids, bases	✓	✓	✓	✓	✓	✓	✓
	Catalyst, Act. Carbon	✓	✓	✓	✓			✓
	Fats & oils	✓	✓	✓	✓		✓	✓
	Petrochemical	✓	✓	✓	✓		✓	✓
	Solvents, Paints	✓	✓	✓	✓		✓	✓
	Water, Waste Water	✓	✓	✓	✓	✓	✓	✓

## Filter Elements

	Models	PVBS	PVBT	PVBA	PVBM	PVPP	PVSC	PVBD
FILTER MEDIA	NMO Mesh	✓	✓	✓	✓	✓		✓
	PONG Felt	✓	✓	✓	✓	✓		✓
	PENG Felt	✓	✓	✓	✓	✓		✓
	POMF Microfibre	✓	✓	✓	✓	✓		✓
	CHF High Flow PP Cartridges	✓	✓	✓	✓	✓		✓

# Stream-Tex PVPP

## Polypropylene Filter Vessels

The Stream-Tex PVPP filter vessel is highly adaptable to precisely fit your particular needs.

This strong, light weight and economical filter vessel is resistant to a wide range of chemicals.

The PVPP is manufactured from Polypropylene with a specific UV-inhibitor for all-weather durability. Tool less opening and closing of threaded lid with perfect seal.

The PVPP Series filter vessel has been designed for easy cleaning with no metallic parts that can rust or corrode to potentially pollute the product. This housing provides reduced bag change-out time without the need for tools, therefore providing minimal process interruption. The PVPP design is totally flexible when considering process connection with one outlet as a possible drain port for product recovery for safe disposal/reuse.

### Features and Benefits

- 100% Polypropylene Construction
- Twist off lid design for quick and easy change-out
- Side inlet/outlet to reduce waste
- Hermetic sealing of filters result in no fluid bypass
- Easy Access for Manual Cleaning or In-Place Flushing
- FDA compliant material



### ORDERING INFORMATION

Model	Design Type	Entry	Bag Size	Vessel Material	Inlet/Outlet	Connections
PV	B = Bag	S = Side	2 5	PP = Polypropylene	2 = 2"	A = ANSI B = BSP
CE Certified, Design operating temperature 43 °C Operating pressure 100 PSI / 6.9 bar at 43 °C						

Order example:

PVBS filter vessel for P2 bag, PP, with 2" BSP =PV-BS2-PP-2B

Operating pressure 6 bar @80 °C

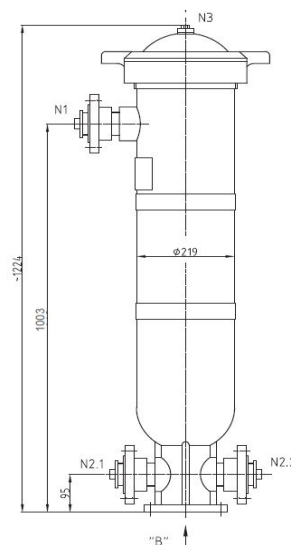


Image 1: PV-PP2 design

### PVPP Technical Information

Model	Recommended operating pressure max	Design Temperature	Max. flow rate	Bag Type	Bag size mm	Connections BSP	Mounting method	Weight
PV-BS5	6 bar	80 °C	300 lpm	P5	152 x 559	2"	Legs	7.0 kg
PV-BS2	6 bar	80 °C	650 lpm	P2	178 x 813	2"	Flange	12.0 kg

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at ΔP=1.0psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVBT

## Stainless Steel Filter Vessels Top Entry

The Stream-Tex PVBT top inlet filter vessel is designed to give perfect 360 degree of filter bags or elements used.

The bag or element sits inside the filter, clamped by the combined lid with inlet and prevents any possible bypass.

This provides exceptional performance in the most challenging liquid filtration processes and the best seal design suitable for critical filtration demands in food and beverage, pharma and biopharma industries.

### Features and Benefits

- Provides the best seal design for critical filtration demands
- Flow rate from 225-700 l/min
- Precision engineered cast head to reduce pressure loss whilst delivering robust construction
- Ease of cleaning post batch processing
- ASME Design
- To suit standard bags and Stream-Tex CHF High Flow Elements
- Heating jacket available upon request



### ORDERING INFORMATION

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Cover Closure
PV-BT	1 = 1 x #1	316 = 316SS	2 = 2"	B = BSP	I = I bolt
	2 = 1 x #2	304 = 304SS	3 = 3"	A = ANSI	

Order example:

PV Vessel for No. 2 bag in 316SS with 2" BSP inlet/outlet configuration standard bead blasted material finishing = PV-BT2-316-2BI

Operating pressure 150PSI / 10.34 bar @85 °C

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Finish
PV-BT	2 = 1 x #2	316 = 316SS	2 = 2"	T = Tri-Clover	DD = mechanical polish 400 grit

Exterior Finishing: Bead Blasting 400  
Interior Finishing: grit mechanical polish  
Gasket Material = EPDM  
Operating pressure 150PSI / 10.34 bar @90 °C

Design temperature = 90 °C  
Legs available upon request

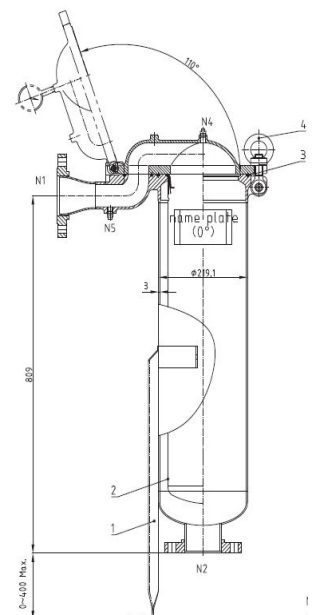


Image 1: PV-BT2 design

### PVBT Technical Information

Model	Filter area	Design Temperature	Max. Flow rate	Exterior/Interior Finishing	Pressure Rating max	Gasket Material
PV-BT-1	0.19 m <sup>2</sup>	90 °C	225 l/min	Standard Bead Blasted or mechanical polish	10 bar	EPDM
PV-BT-2	0.45 m <sup>2</sup>		450 l/min			
PV-BT-2	3 m <sup>2</sup>		700 l/min			

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at ΔP=1.0psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVBA

## Stainless Steel Filter Vessels Top Entry - 45° Ergonomic Design

The Stream-Tex PVBA top inlet bag filter with 45° design was developed to assist with WHS related issues in the process of regular bag changes.

The angle allows for easy removal of the bags with a lot less strength required to lift the bags out of the vessels. The specially designed lid with an integrated locking mechanism adds further safety to the operators.

### Features and Benefits

- Based on our standard PVBT range of filter vessels
- Flow rate from 225-700 l/min
- 45° design for ease of bag changes
- Reduces OH&S issues
- Sanitary finish available
- ASME Design
- Suits standard bags and Stream-Tex CHF High Flow Elements



### ORDERING INFORMATION

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Finish
PV-BA	2 = 1 x #2	316= 316SS	2 = 2"	T = Tri-Clover	DD= mechanical polish 400 mesh

Order example:

PVBA 45° design vessel for No. 2 bag, 316SS with 2" Tri-Clover closure = PV-BA2-316-2TDD  
Gasket materials: EPDM  
Operating pressure 150PSI / 10.34 bar @85 °C  
Finish: Mechanical Polish 400 mesh

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Cover Closure
PV-BA	2 = 1 x #2	DF = 316SS Dairy Finish	3 = 3"	R = RJT Connection	l = l bolt

PVBA 45° design vessel for No. 2 bag, 316SS with DF Dairy Finish, 3" RJT Connection = PV-BA2-DF-3RJT  
Gasket materials: EPDM  
Operating pressure 150PSI / 10.34 bar @85 °C  
Finish: Mechanical Polish 400 mesh

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Cover Closure
PV-BA	2 = 1 x #2	304 = 304SS	2 = 2"	B = BSP	l = l bolt

PVBA 45° design vessel for No. 2 bag, 304SS with 2" BSP Connection = PV-BA2-304-2BI  
Gasket materials are in EPDM  
Operating pressure 150PSI / 10.34 bar @85 °C  
Finish: Standard Bead Blasted

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels



# Stream-Tex PVBA

## Stainless Steel Filter Vessels Top Entry - 45° Ergonomic Design

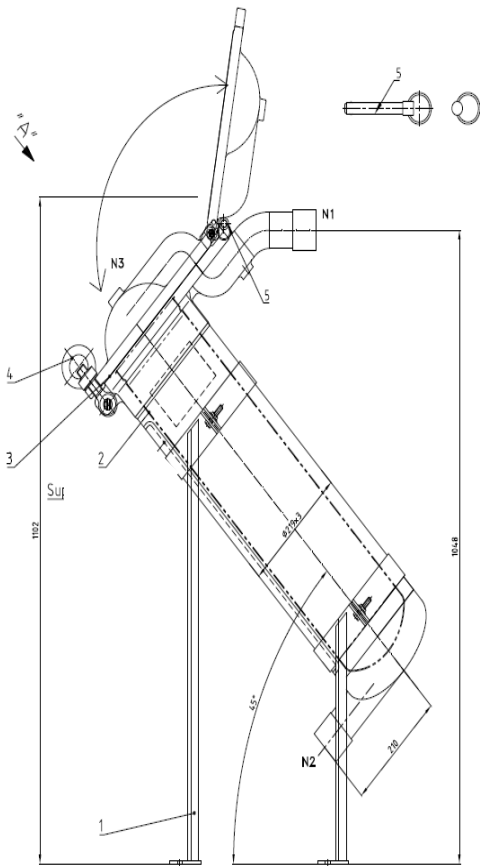


Image 1: PV-BA2 design

### PVBA Technical Information

Model	Filter bag surface area	Design Temperature	Max. Flow rate	Exterior/Interior Finishing	Pressure Rating max	Internal Wetted Part Material	Gasket Material
PV-BA	0.45 m <sup>2</sup>	85 °C	450 l/min	Standard Bead Blasted or Mechanical polished 400 grit	10 bar at 85 °C	304SS 316SS	EPDM

#### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVBS

## Stainless Steel Filter Vessels Side Entry

The Stream-Tex PVBS durable side entry filter vessel provides convenience in handling filtration processes, easy opening mechanism with bag filter fixing ring to ensure good sealing for both plastic collar fully welded filter bags and sewn felt or NMO filter bags and CHF High Flow Filter Elements

The PVBS vessel is suitable for general filtration requirements in most industrial applications with liquid of low to medium viscosity

### Features and Benefits

- Versatile design sizes for duty convenience
- Flow rate from 225-700 l/min
- Swing eye-bolt closure construction for safe operation and maintenance
- Unique design for perfect bag sealing
- To suit CHF High Flow Filter Elements
- To suit P2 sized filter bags



### ORDERING INFORMATION

Model *	Size	Vessel material	Inlet/Outlet	Connections	Cover Closure
PV-BS	1 = 1 x #1 2 = 1 x #2	304 = 304SS 316 = 316SS	2 = 2"	B = BSP	I = I bolt

Order example:

\* 2" ANSI available upon request  
Mechanical polished available upon request

Operating pressure 150 PSI /  
10.34 bar @85 °C

Model	Size	Vessel material	Inlet/Outlet	Connections	Cover Closure
PV-BS	2 = 1 x #2	316 = 316SS	3 = 3"	A = ANSI	I = I bolt

PV-BS2-316-3AI for CHF High Flow  
Filter Element

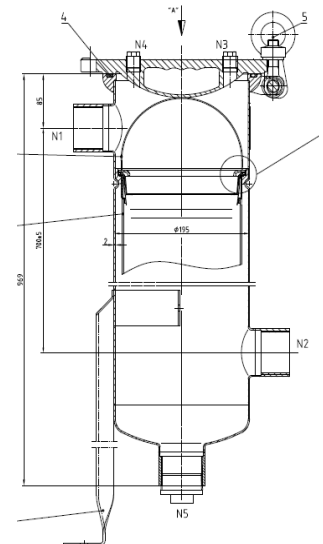


Image 1: PV-BS2 design

### PVBS Technical Information

Model	Filter area	Max. Flow rate	Pressure Rating max	Exterior/Interior Finishing	Internal Wetted Part Material	Gasket Material
PV-BS1	0.19 m <sup>2</sup>	225 l/min	10 bar at 85 °C	Standard Bead Blasted	304SS	EPDM
PV-BS2	0.45 m <sup>2</sup>	450 l/min			316SS	
PV-BS2	3 m <sup>2</sup>	700 l/min			316SS	

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at ΔP=1.0psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVBS

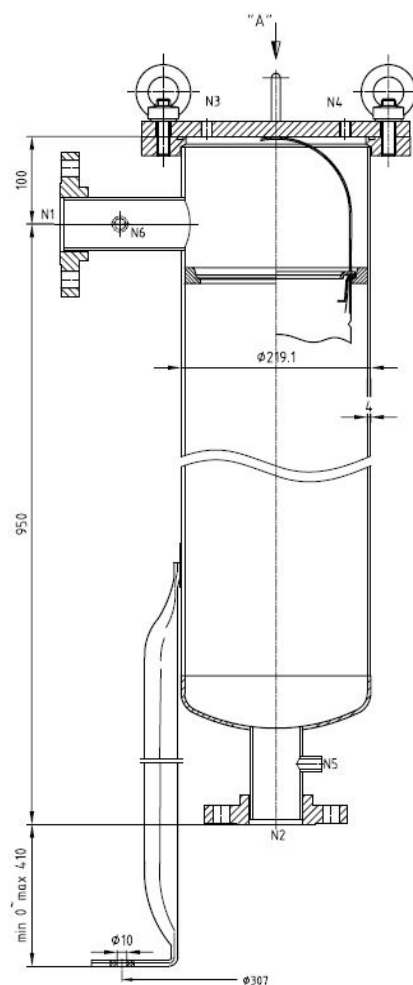
## Stainless Steel Filter Vessels Side Entry - High Pressure

The Stream-Tex PVBS durable side entry filter vessel provides convenience in handling filtration processes, easy opening mechanism with bag filter fixing ring to ensure good sealing for both plastic collar fully welded filter bags and sewn felt or NMO filter bags and CHF High Flow Filter Elements

The PVBS vessel is suitable for general filtration requirements in most industrial applications with liquid of low to medium viscosity

### Features and Benefits

- Versatile design sizes for duty convenience
- Flow rate from 225-700 l/min
- Swing eye-bolt closure construction for safe operation and maintenance
- Unique design for perfect bag sealing
- To suit CHF High Flow Filter Elements
- To suit P2 sized filter bags
- Pressure rating max 20 bar @ 90 °C



### ORDERING INFORMATION

Model	Size	Vessel material	Inlet/Outlet	Flange Type	Cover Closure	High Pressure
PV-BS	2 = 1 x #2	316 = 316SS	2 = 2"	A = ANSI	1 = 1 bolt	H = 20 bar @90 °C

Order example:

Exterior/Interior Finishing: Glassbead Blasted  
 Gasket Material = Buna N  
 Operating pressure 290 PSI / 20 bar @90°C  
 Design temperature = 90 °C

### PVBS High Temperature Technical Information

Model	Filter bag surface area	Max. Flow rate	Pressure Rating max	Exterior/Interior Finishing	Internal Wetted Part Material	Gasket Material
PV-BS2	0.45 m <sup>2</sup>	450 l/min	20 bar at 90 °C	Standard Bead Blasted	316SS	EPDM

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVSC Series Self Cleaning Mechanical Filters

## Specification

- Material 304 or 316 grade Stainless Steel
- Flange types ANSI, JIS and DIN available
- Pressure rating 10 bar
- Three filter vessel sizes available

## Applications

- Pulp & Paper Mills
- Food Processing
- Water Wells
- Steel Mills
- Chemical Processing
- Parts Washing
- Waste Oil

## Sizing Guide

Liquid Type	Viscosity CPS	Model PV-SC 1.5	Model PV-SC 2	Model PV-SC 3
		max. flow rates l/min *		
Water	1	50	200	750
Adhesive	10,000-50,000	15	65	200
Edible Oils	10 - 100	50	200	750
Honey	50 - 100	50	200	750
Ink, oil based	100 - 1000	50	200	750
Ink, water based	10 - 100	50	200	750
Paint	500 - 1,000	50	200	750
Resin	5,000-50,000	15	65	200

\* Based on retention of 50 Micron or greater  
Max. flow based on max. of 500 ppm of solids to be removed.

## Pipe Size

Model	PVSC-1.5	PVSC-2	PVSC-3
Pipe Size	1.5"	2"	3"

Order example:

PV Vessel in 304SS with 3" DIN Flange  
= PV-SC-3



## Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed.  
Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.  
Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVSC Series Self Cleaning Mechanical Filters

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Simple, Effective and Continuous Filtration

## Features and Benefits

- Self cleaning filter system, fully automated
- Ideal for high viscosity, high dirt loading and abrasive liquids applications
- Eliminate high running costs of disposable type filter cartridges and filter bag systems
- Constant and low pressure differential filtration
- No downtime to change bags, increase filter productivity
- No manual handling of used filter bags

## Working Principle

Our mechanical clean filter system is designed to handle to filter particles 25 micron and larger in various industries where high particle content, viscous and sticky liquids are present which other systems can't handle.

PVSC filters are ideal for continuous and batch applications.

The filtration system uses dual pneumatically driven activators to move the special grade Teflon disc up and down the screen to perform the cleaning operation inside of the vertically slotted wedge or perforated screen.

The system can either be operated in manual or automatic mode. The collected dirt is periodically purged in intervals of less than 1-2 seconds to minimise product losses during operation.



A cleaning disc is moving up and down the screen surface to remove the dirt which then can be discharged through the drain valve at periodical times.

The cleaning- and discharge frequency can be programmed using the integrated PLC to suit the individual requirements.

Alternatively the system can be operated manually.

The cleaning disc is made from a special grade of Teflon with a dual edge system, one side for cleaning and the other side for wiping.

The cleaning disc is firmly pressed against the inner screen by a mechanical system.



# Stream-Tex PVBM

## Multi-Bag Steel Filter Vessels Side Entry - Overview

### Overview

Stream-Tex is able to offer PVBM multi bag vessels for applications requiring high flow rates or a large filtration surface area. Flow is split equally through each filter bag or ensuring an even distribution of solid loading.

Filter bags or High Flow Elements are individually held in position by three point locking bayonets, which compress the filter bag ring and produce a seal with the filter vessel.

The vessel lid has a counterbalanced spring assisted lifting mechanism ensuring that opening and closing the filter vessel is safe and easy for operators.

The counterbalance is precise and gives the lid a practically weightless feel. As an additional safety feature, a simple locking system is fitted on the hinge as standard and can be engaged when the lid is in the fully open position.

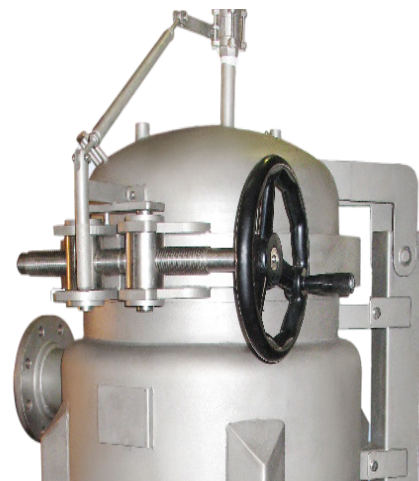
Multi bag vessels are provided with a choice of two closure types, either a bolted lid or with a quick closure clamp.



### Quick closure system

The quick closure system was developed for multi bag vessels to eliminate the need for swing bolts, decreasing the time required for filter bag changeout. The system consists of a heavy-duty precision-engineered clamp, an opening wheel with counter screw, and a safety lock attached to a ball valve fitted to the vent of the housing.

To change the filter bags, first the safety lock is released, simultaneously venting the filter housing. Turning the hand wheel then opens the clamp. The hinged lid can then be lifted and the filter bags changed. The reverse procedure is carried out to close the housing.



### Design

Multi Bag Vessels are designed to be ergonomic. A tangential bottom outlet minimises vessel height, reducing the installation space and providing operators with a convenient bag changeout height.

There are several standard inlet and outlet orientations

STYLE 3: Side inlet / tangential bottom outlet on the opposite side.

STYLE 4: Side inlet / tangential bottom outlet on the same side. The hinged lid design minimises the installation floor space required compared to traditional davit lid models.

### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed. Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag. Please consult one of our product specialists when sizing these vessels

### Operating information

The standard pressure rating is 10 bar, the standard temperature rating is 90 °C. Higher temperature ratings are available upon request.

Optional features are available to meet all customer requirements such as alternative inlet and outlet orientations, heating jackets and many more.

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed. Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

# Stream-Tex PVBM

## Multi-Bag Steel Filter Vessels Side Entry - Versatile universal design

The Stream-Tex PVBM top inlet bag filter is designed to give perfect 360 degree sealing of a plastic collar fully welded type filter bag.

The bag sits inside the filter clamped by the combined lid with inlet to ensure absolute no bypass.

This provides exceptional performance in the most challenging liquid filtration processes and the best seal design suitable for critical filtration demands in food and beverage, pharma and biopharma industries.

### Features and Benefits

- Cost-Effective solution
- Perfect bag to housing sealing, no by-pass
- Able to handle very high flow rate and high dirt holding capacity
- Rugged, reliable



### ORDERING INFORMATION

#### PVBM Multi-Bag Pressure Vessels \*

Model	No and type of bags	Vessel Material	Inlet/Outlet	Connections	Flow rate (l/min)
PV-BM	2 = 3 x #2	304 =	3"	A = ANSI	900
	4 = 4 x #2	304SS	4"	D = DIN	1800
	5 = 5 x #2		5"		2250
	6 = 6 x #2		6"		2700
	8 = 8 x #2		8"		3600
	10 = 10 x #2		10"		4500
	11 = 11 x #2		10"		4950
	12 = 12 x #2		10"		5400
	14 = 14 x #2		12"		6300
	16 = 16 x #2		12"		7200
18 = 18 x #2		12"		8100	
Operating pressure 150PSI / 10 bar					

Order example:

PVBM 6 bag Vessel for No. 2 bag in 304SS with 4" DIN inlet/outlet configuration = PV-BM6-304-4DI

Gasket materials are available in Buna, EPR, Viton, Viton Teflon Encapsulated, Buna White FDA.

\* Available as option:

Heating jacket design for high temperature processing application. Hydraulic-assisted davit cover, please contact us for more details.



### Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed.

Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag.

Please consult one of our product specialists when sizing these vessels

# Stream-Tex PVBD Duplex Multi-Bag Stainless Steel Filter Vessels

The Stream-Tex PVBD Duplex Stainless Steel filter vessels are highly cost-effective over the entire lifecycle of the equipment. Both housings filter simultaneously, doubling the flow rate capacity of a single vessel. Isolation of a PVBD Duplex allows each system to operate independently for continuous service during filter element replacement, so that your filtration is not interrupted the process.

Duplex Stainless Steel Pressure Vessels can:

- Deliver many years of economical service life
- Eliminate expensive downtime due to the filter bag change-outs

Duplex Stainless Steel Vessels are suitable for applications in the chemical processing, pharmaceutical, agricultural, fertilizer, petrochemical, and power industries.



Model	Size	Vessel material	Inlet/Outlet	Connections
PV-BD	2	304 = 304SS	3 = 3"	AH = ANSI

Exterior/Interior Finishing: Standard Bead Blasted  
Gasket Material = EPDM  
Operating pressure 150 PSI / 10 bar @85 °C  
Design temperature = 85 °C

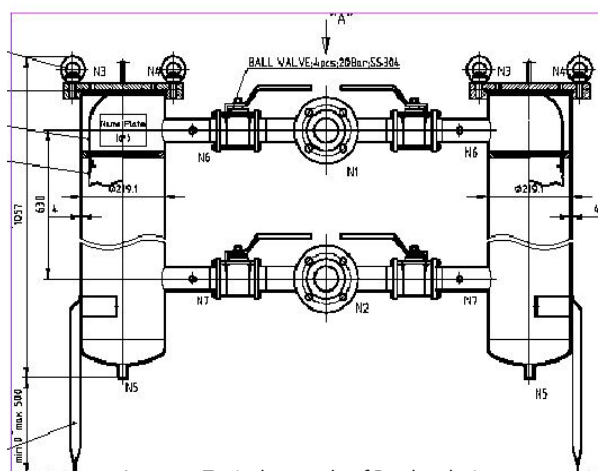


Image 1: Typical example of Duplex design

## Vessel sizing / System configuration

\*Maximum flow rate is based on aqueous flow at  $\Delta P=1.0$ psi clean through filter only without bag installed. Achieved flow rate is dependant on type of fluid being filtered, fluid viscosity and temperature, micron rating and type of filter bag. Please consult one of our product specialists when sizing these vessels



# Stream-Tex Accessories

We are able to supply a wide range of accessories to complement our range of pressure vessels.

Selecting the correct accessory such as evacuation floats, magnets or high capacity strainer baskets can reduce fluid wastage and increase filtration performance.



Please consult one of our product specialists to assist you with the right selection of accessories to suit your equipment and requirements.



## Overview

- Strainer Baskets
- Adaptor heads
- Gaskets, O-Rings, Eyebolt tool, Lids
- Pressure Gauges
- Magnets
- Evacuation Floats

## Accessories

Evacuation Float	Magnets	O-Rings, Seals	Strainer Baskets	Bag Adaptors
				
<p>Displace liquid in the vessel ensuring easier bag changes. Reduces product wastage To suit most standard bag housings</p>	<p>Magnetic particles from process liquid adhere to the bar Filter bag lifetime is prolonged by reducing the amount of solids collected in the bag Reduced surface abrasion of filter bags caused by sharp particles To suit standard #2 bags 24"long</p>	<p>Depending on the product to be filtered, StreamTex filter vessels can feature a variety of O-rings materials, including BUNA-N, Viton, Teflon® encapsulated Viton, Teflon®, and EPR.</p>	<p>Based on our standard PVBT's 45° design for ease of bag change, reduces OH&amp;S issues Flow rates from 115-450 l/min</p>	<p>Adapter Heads are available in a variety of pipe size and materials to be used with steel ring bags in an open filter system. Adapter heads are ideal for applications where vessels are impractical.</p>

# Sefar

## Local Service - Local Manufacturing



### Technical assistance and Service

- Full Lab facilities for detailed media analysis
- Material Testing facilities
- Vessel selection service
- Filter media selection
- System design assistance

With our extensive experience in the process filtration industry and using our local test lab facilities we have the ability and equipment to design a system for you to suit your individual process application.



Our local production facilities allows us to design and produce costeffective quality filter bags, adapting existing designs to provide you with tailor-made solutions as well as custom made designs to suit many other applications.

We can also integrate custom made labels, colour coding or other designs that can assist your quality requirements by ensuring the right filter bag is used for each process step.



CUSTOM MADE DESIGN

APPLICATION SPECIFIC MODIFICATION

FAST TURNAROUND TIMES

CONSISTENT QUALITY

# Why Sefar?



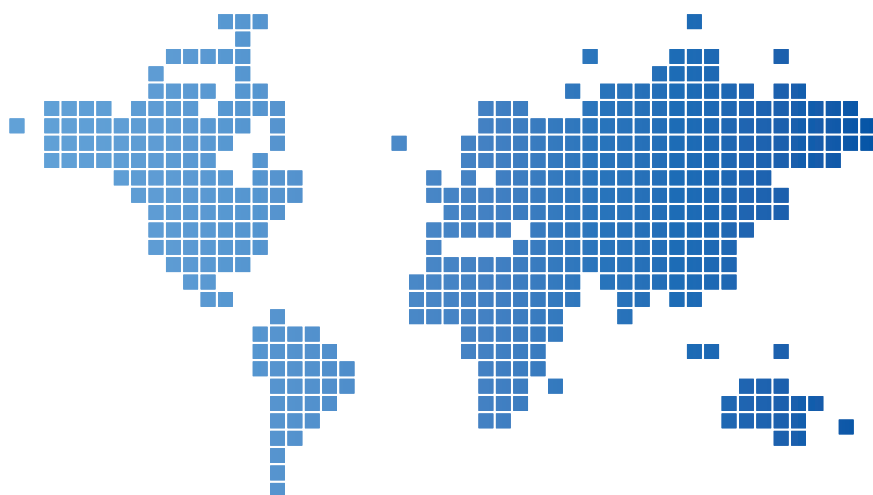
» Brand  
Global brand strength and reputation.

» Global network  
Strong customer service and fast, reliable deliveries.

» Added value  
Innovative solutions for individual needs and requirements.

» Vertical integration  
From yarn to fabric production and ready-made solutions.





## Sefar Oceania

The best value solutions for filtration and separation applications

Sefar is the leading manufacturer of precision fabrics from monofilaments to custom-tailored filtration solutions in the industrial market. Sefar products are used in a wide variety of industries, reaching from mining and refining, food and beverage, pharmaceutical, chemical, aerospace and architecture. With its profound understanding of applications, Sefar helps its customers to achieve optimum results in their industrial processes.

Sefar Oceania was established in 1968 and it is a 100% subsidiary of Sefar Switzerland with 6 sales regions covering Australia, New Zealand and the Pacific Rim. With over 55 employees and manufacturing facilities in Australia and New Zealand we are the most diverse mesh and filter products solution provider in a single supplier.

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Our current general sales conditions shall apply.

Please consult the current local product data sheet prior to any use.

**S E F A R**

