



# Dairy Production Solutions The best value solutions for filtration and separation applications







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## **ABOUT SEFAR**

## SEFAR TRANSFORMS NEEDS INTO SOLUTIONS

Sefar, for around 190 years, is the global leader in manufacturing of Monofilament Precision Fabrics for customer-tailored solutions in industrial filtration, separation processes and technical applications.

Through our filtration solutions and profound technical understanding, we meet the most demanding needs for the purification and filtration of liquid, understanding the customer's requirements, and choosing the best solution in order to have the highest level of quality for the final product, thus optimizing the production processes, in a *Total Cost of Ownership Approach*.

We are dedicated in our offering of tailored industrial filtration and separation solutions to minimize downtime on continuous or batch operating systems maximizing efficiency's and effectiveness of our customer fluid processes management. We support our customers through a strong technical knowledge based on innovation, quality & tailored solutions, everywhere leveraging on our core integrity values.

### THE ONLY FABRICATOR WITH A FULLY **INTEGRATED SUPPLY CHAIN**

### Manufacturing and Quality

Sefar Oceania's local manufacturing facilities can provide tailor-made solutions for a wide range of production processes as well as custom made designs that guarantee to have the best quality of the final

During the production we assure strict product quality and reliability leveraging on a strict monitoring and control of the production process. We can provide custom made labels, colour coding or other designs to assist our customers quality requirements by 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.

- Transparent & traceable business practice
- Manufacturer of precision fabrics using monofilament & multifilament yarns
- Custom made designs with a consistent product quality
- Full control over product quality and product tracking









Produces fine & medium sized yarns

Operates Weaving Plant Customized Orders of filter materials

Switzerland Poland Romania Mexico

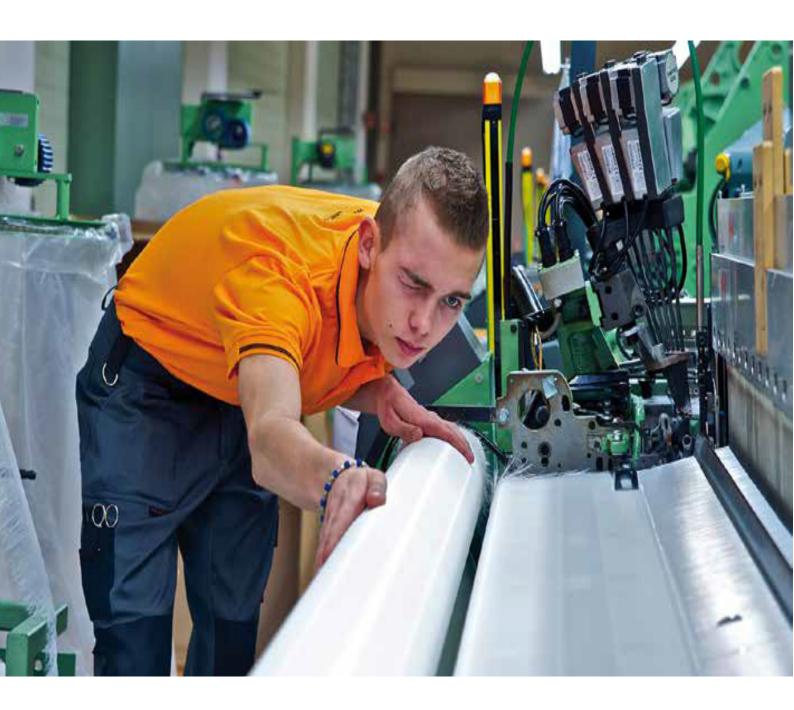
Switzerland Romania Thailand

Australia **New Zealand** 

### **GLOBAL PRESENCE**

Global knowledge and experience, local support.





## FABRICATION & FACILITY



Fabrication close to customer for fast delivery and service



Machine laser cutting to make consistent shape and sizes in production



Stocking facility to reduce lead time in the region



FDA & EU compliance



Lab capability to assure customer of quality control



Fabrication under ISO 9001 system



White room facility

## SEFAR SOLUTIONS FOR DAIRY INDUSTRIES

### From start to finish

Implementation of technical solutions to improve milk production process optimization is of vital importance. The reduction of time, resource, wastage, and unnecessary costs, while attaining the process objective of creating the best final quality product.

Sefar, through our complete solutions proposal for filtration and separation applications, supports the dairy products industry to improve the process effectiveness and process reliability leveraging on a total cost of ownership approach.

Our technical solutions can be used in different steps of dairy production process from liquid filtration to dry filtration to have the highest quality for the dairy product.



**LIQUID FILTRATION** 

Security solutions for incoming milk

Process Water Resins column security filters

Production Filtration

Incoming water/ Bore water filtrations

Waste Water filtration

Security Filtration
Solutions

**DRY FILTRATION** 

CIP dust bag house

Boiler house filters

Filter support cages

Product return bag house

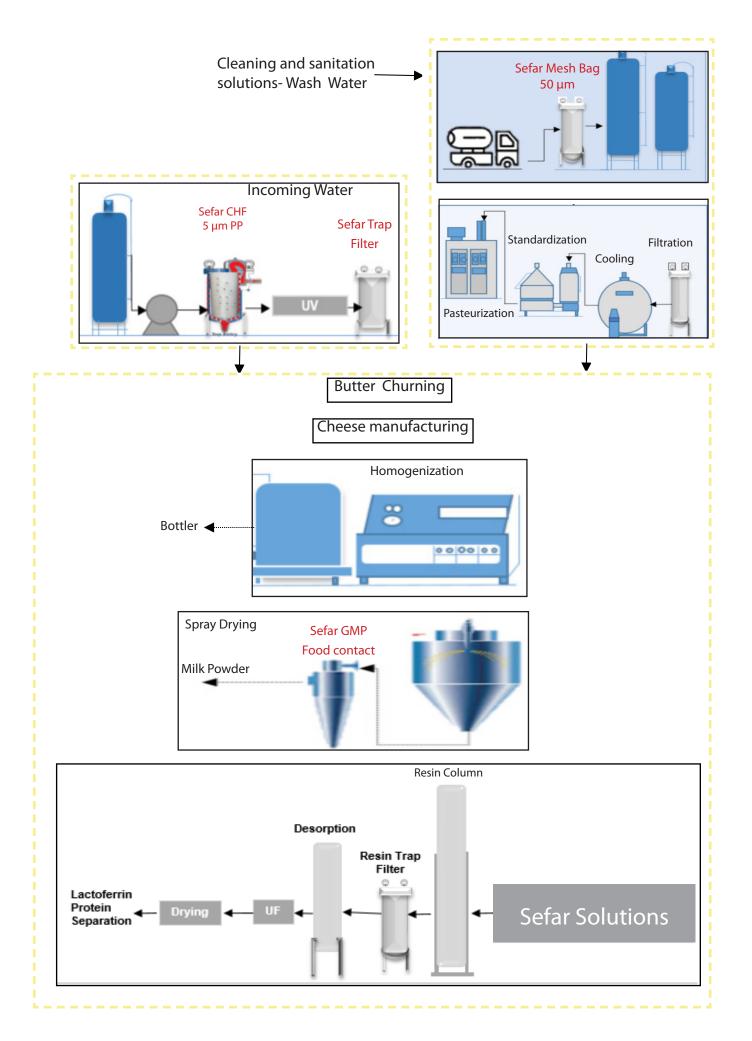
Breather / Vent Filter bags

SCREEN/CAGE

New Powder screens

FDA sifter balls and pads

Screen re-meshing



## Stream Tex Liquid Filtration Solutions

Sefar solid - liquid filtration and separation solutions that minimize the downtime on continuous or batch operating costs resulting in maximum production efficiency leveraging on the customer's total cost of ownership.



Unique CHF High Flow Pleated Element inside to outside flow pattern design, helps maximise the usable surface area per filter in a compact housing design. Fewer change outs required at a lower capital investment costs



The Stream Tex Filter Bags in microfiber, felt and mesh media, inside to outside flow pattern design, minimize downtime and cost on continuous or batch operating, resulting in the capture of contaminants on the inside of the bag



Custom manufacturing locally and globally.
Stock held locally and globally.

Complete range of solutions that 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.





## Stream Tex Liquid Bag Filtration Solutions

Sefar offers a wide range of liquid filter bags for solidliquid separation with premium quality Sefar monofilament mesh and the felt media.

The unique fully welded seam design combined with the multi seal collar eliminates the risk of bypass caused by stitching holes, thus guaranteeing the best compression sealing mechanism during operation.

Stream Tex Filter Bags inside to outside flow pattern design minimize downtime and cost on continuous or batch operation, resulting in the capture of contaminants on the inside of the bag.

Our solutions offer a complete range of filtration media and size, from microfiber, felt and mesh in polypropylene, polyester, nylon and stainless steel. Our solutions are designed to have outstanding performance on dirt holding capacity and service life due to the thickness of material and the microfiber multilayer structure.



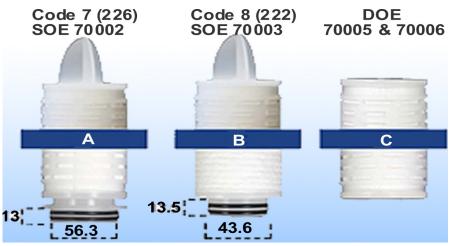


## Stream Tex Liquid Filter Cartridges Solutions

Sefar offers a complete range of cartridge filtration solutions from prefilters to the final filtration solutions in various materials and configurations.

Sefar helps customers to identify the best solution in a production plant 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.





Type A
Single Open End
Code 7 (226), 70002
O-Ring Bayonet Lock 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

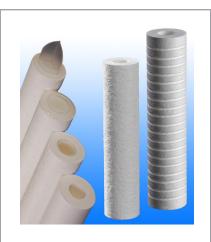
Type C

Double Open End

with Gaskets = STANDARD



StreamTex CMBB-N Nylon Melt Blown filter cartridges with high dirt holding capacity for critical industrial filtration applications



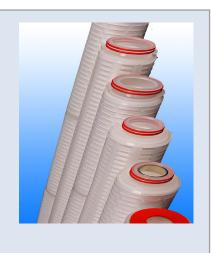
StreamTex CMB Polypropylene Meltblown filter cartridges providing cost effective filtration for all fluid applications



mance for liquid applications



StreamTex CCB/CCF Activated Carbon filter cartridges with superior adsorption power with activated carbon



StreamTex CPL Nylon 6 pleated filter cartridges with superior filtration efficiency, providing the cleanest process and fluids in a variety of fine filtration applications



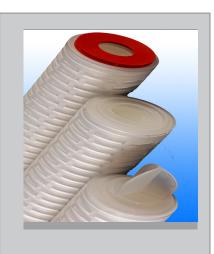
StreamTex CME PES Membrane filter cartridges with an excellent chemical compatibility, 100% integrity tested



StreamTex CME PTFE Membrane hydrophobic filter cartridges, with high flux and long service life for various acid and alkali-base solutions.



StreamTex CPL/CSI Pleated and Sintered Stainless Steel cartridges for high temperature applications and critical solvent resistance



StreamTex CPL Polypropylene pleated filter cartridges providing cost effective filtration with high dirt holding capacity

### **Pressure Vessel**

Sefar has designed a diversified range of pressure vessels to meet the most demanding industrial filtration and separation applications. From side to top entry, single to multibag, Sefar provides a wide range of filter housings in different materials and design, to cover all the customer's requirements such as temperature, chemical compatibility, pressure, design and certifications. Our solutions accommodate a large range of flow rates for different inlet/outlet sides for any industrial liquid filtration applications.



Many of our pressure vessel custom-built solutions include:

- Multipurpose vessels: vessels to accommodate both filter bags and high flow elements capable of increasing flow rates by four times and providing absolute filtration level.
- Sanitary finish: vessels designed and built to meet the requirements of the food and beverage / Dairy industries
- Duplex Filter Systems

PVBS Side Entry	PVBT Top Entry	PVBA Top Entry / Easy bag change	PVHF Side Entry High Flow rates

- Single bag design
- Steel Side entry vessels
- Cost-effective solution
- Flow rates from 55-450 l/min
- Steel Top entry vessels
- Minimal headroom required
- Easy bag change-out
- Flow rates from 115-450 l/min
- Based on our standard PVBT's
- 45<sup>o</sup> design for ease of bag change, reduces OH&S issues
- Flow rates from 115-450 l/min
- · High flow steel vessel
- Most cost-effective solution
- Flow rate up to 800 l/min

PVBM	PVCM	PVSC	PVSE
Multi-Bag	Multi-Cartridge	Self-Cleaning	Pre-Filtration Separator



- Multi bag Vessel
- 2-18 bags
- Low profile design



- Multi cartridge Vessel
- From 3 200 cartridges
- Low profile design



- Self cleaning filter
- No bags required
- 3 Sizes available
- Flow rates from 50-750 l/min



- Maintenance free separator
- Protects equipment
- Cyclone design
- Flow rates from 330-5000l/min

Models	PVBS	PVBT	PVBA	PVHF	PVBM	PVCM	PVSC	PVSE
Series	Side Entry	Top Entry	45 Deg	High Flow	Multi Bag	Cartridge	Self-cleaning	Separator
Material	304/316	304/316	304/316	304/316	304/316	304/316	304/316	304/316
Temperature Range	90° C	90° C	90° C	90° C	90° C	90° C	90° C	90° C
Filter bag size	2	2,3,4	2	2	2	n/a	n/a	n/a
Number of bags / Car- tridges	1	1	1	1	2 - 18	6 - 200	n/a	n/a
Filtration surface area in m2	1 = 0.19 2 = 0.45	0.45, 0.05,0.1	0.45	0.45	0.9 - 8.1	tba	n/a	n/a
Flow rates I/min	55-450	115-450	115-450	800	900-8,100	tba	50-750	330-5,000
inlet/outlet size	2"	2"	2"	3"	3″-12″	3″-12″	1.5"-3"	2"-10"

A new innovation in our pressure vessel range for dairy industry, Stream Tex PVBA top inlet bag filter with  $45^{\circ}$  ergonomic design.

The unique design P2 filter vessel on a 45° angle assists the dairy operator in installing and removing the filter bag with a lot less strength required to lift the bags out of the standard vessel. The special design of the lid with an integrated locking mechanism adds further safety to the operator, respecting the OH&S regulations based on robust health and safety systems in place.



Model	No and type of bags	Vessel Material	Inlet/ Outlet	Inlet/Outlet flange	Finish
PVBA	2 = 1 x #2	304 = 304SS	2"	A = ANSI	P = mechanical
		30433		B = BSP	polish
				T = Tri-Clover	
				RJT	

### Operating pressure 150PSI / 10.34 bar

### Order example:

PV 45<sup>O</sup> design Vessel for No. 2 bag in 304SS with 2" BSP inlet/outlet configuration and Tri-Clover closure = PV-BA2-304-2T-I

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





The unique, absolute @99% filtration efficiency rated, Pleated Microfibre Membrane filter elements are FDA compliant, feature an inside to outside flow pattern design, and provide a significantly increased service life, and dirt holding capacity through the Unique Internal Pleat Design.

The Irrigation Channel Mesh Design inside the pleats (figure 1) provides a uniform distribution of fluid and contaminants to the entire filtration surface of the filter element. The Stream Tex CHF High Flow Polypropylene Pleated Filter Element is a large diameter, coreless, single open end, pleated cartridge, designed to reduce system investment and disposal cost via long service life.

One Stream Tex CHF High Flow Polypropylene Pleated Filter Element can replace 10 to 20 standard P2 bags, saving costs of change outs. The innovative compact system design reduces the size of the housing required for your application.



Figure 1: Irrigation Channel Mesh Design

#### Features and Benefits

- Inside to Outside Filter Design provides consistent filtrate quality, a clean filter vessel, and easy removal of contaminants
- High Surface area in a Pleated Micro Fibre design provides more then double of the flow rate of a standard P2 bags, longer service life, and a much higher dirt loading capacity for fewer filter change-outs
- Compact and Space Saving Design that fits the main existing P2 size vessels results in lower capital and installation costs, easy disposal
- Absolute ratings @99% filtration efficiency rated results in constant particle removal efficiency's, which extend existing final sterilizing membrane life



- Absolute Rating @ 99%:
- Filter Media, Center Core, End Caps, Outer
   Sleeve: 100% Polypropylene
- O-Ring: EPDM

**Element Dimensions** 

- Inside Diameter: 85 mm
- Outside Diameter: 150 mm
- Length: 27" (685 mm)



Operating Conditions

- Max. Operating Temperature:60°C (CIP 90°C)
- Max. Differential Pressure: 3 bar
   @ 20°C
- Recommended Differential
   Pressure: 2 bar @ 20°C

### **Ordering Guide:**

Type of Filter	Size	Rating µm		
CHF	2	005, 001, 002, 003, 005, 010, 020, 040, 070, 100, 120		

## Filter Vessel Solution – PV HF High Flow Pressure Vessel

Stream-Tex PVHF filter element pressure vessels are specifically designed to accommodate flow rates of up to 800 liters per minute in a compact design. The result is a pressure vessel with a small footprint, designed for user-friendly elements installation and removal.

Stream Tex PVHF filter element housing is available for pressure ratings of 10.3 bar (standard) and optional 20.6 bar.

### Main Features for pressure vessel for single P2 Element:

- Completely cleanable with easy access to all wetted parts
- Full 80 mm ports for unrestricted flows
- Positive bag or filter element sealing
- Single gasket cover seal: EPDM
- Inlet/Outlet ANSI flange connections 3"
- Internal to external mechanical polished surface
- 304 or 316 S/S construction
- Certification: AS/NZ1210







### Ordering Guide

Model	Size	Material	Inlet/Outlet	Type of Flange	Design Temperature	Design Pressure
PVHF	2	304-316 Polished Stainless Steel	3″	A - ANSI	120°C	10 bar

## PURA TEX Powder retention - GMP filter bags

The production of dry milk powder within the dairy industry which is completely safe for human consumption, requires pressing control of product contamination during manufacturing.

Sefar Powder Retention GMP filter bags represent the highest level of security available on the dairy manufacturing.

The folded edge avoids any possible contact between the product and the needle felt so that there is no possibility of powder contamination from the staple fibres.

Anti static properties are the main requirement in any dry filter application to aid with filter performance and filter safety. Sefar is the unique company in the world that can offer fully anti static material that does no leach into the product, and ATEX approved to 10ohms from base to cuff.

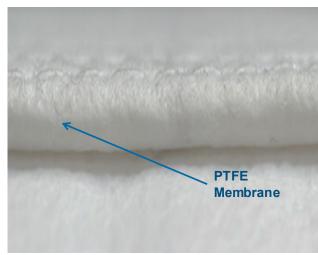
### Certifications:

- EC 1935/2004
- EC 10/2011
- GMP EC 2023/2006 or cGMP
- FDA CFR 177
- · ISO 9001
- · ISO 22000
- · Melamine free declaration
- ATEX (EC 94/9)
- · Single packaging
- · Customized labeling

### Applications:

- CIP
- Waste product
- Product retention





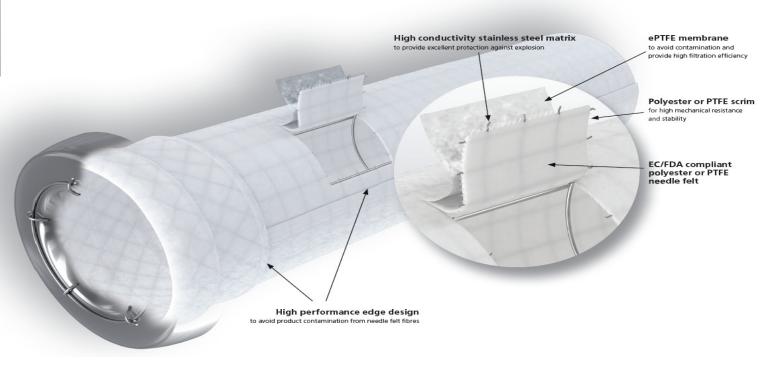


Product code	Material	Felt Weight gr	PTFE Membrane	Antistatic
07-550-50 NFMA PHARMA	Polyester	550	•	
07-550-50 NFM PHARMA	Polyester	550		
24-750-50 NFM PHARMA	PTFE	750		

## **Unique Selling Proposition**

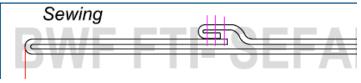
## The certified filter bag solutions







- Only the ePTFE membrane is in contact with the product
- The sewing thread material is PTFE with special needles used to produce the stitches
- High performance edge design
- Bottom design with folded open edges to avoid needle felt staple fibers to be in contact with the product.
- Choice between different levels of certification (Top, ATEX, Middle level)
- No leakage due to an unique design used to manufacture the bags
- Single packing for top level (GMP)
- FDA and EU compliant







### Screens

Sefar designs, and manufactures durable screens for a number of dry powder applications in the dairy industry.

Sefar Screens are manufactured to the required applications.

Our screening material is carefully tensioned and then bonded or bolted to the stainless steel rings. Only FDA compliant materials are used for adhesives and sealants.

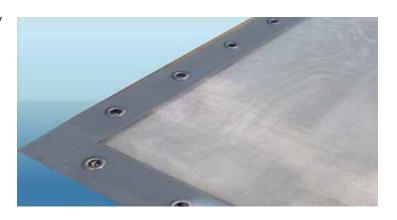
Sefar has a large range of mesh options available such as FDA Nylon and Stainless Steel.

#### Features & Benefits:

- · High flow rates for maximum throughput
- Precise mesh openings for consistent particle sizes
- All screens are tensioned to the correct mesh specifications and tension checked after screen completion, this is vital to the life and performance of every screen.
- Proper fit and flatness for trouble-free operation
- · Custom made screens to meet virtually any need
- · New Powder screens
- Available in FDA Nylon and Polyester mesh
- FDA sifter balls and pads
- Kason / Swaco / Russell Finex spares
- Screen re-meshing

## CAGE -Food Grade Dust Filter Cages Features

- Burr free
- · No sharp edges
- · No weldmarks, discoloration
- · Material 304 Stainless Steel
- Finish: Polish < 0.2 Ra Electro-Polish



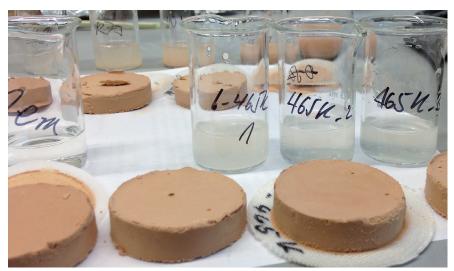




### **Application laboratory**

Sefar through a profound technical understanding and tailored range of solutions, supports customers in production process optimization choosing the best filtration solution, guaranteeing the best quality customer product and supporting the customer through an excellent service.





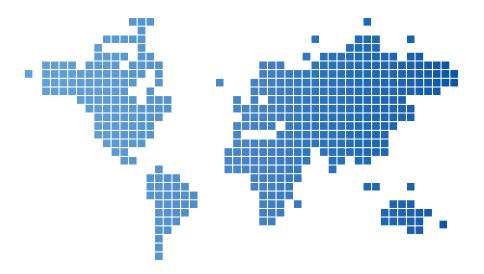


Particle size analysis



### Services

- Production Process Optimisation
- · Tailored Filtration Solution Sizing
- Customer Technical Training
- Product Evaluation
- Regulatory Support
- · Customer Service



### Sefar Oceania

The best value solutions for filtration and separation applications

Sefar is the leading manufacturer of precision fabrics from monofilaments for customer-tailored filtration solutions in the industrial market. Sefar products are used in a wide variety of industries, reaching from mining & refining, food and beverage, pharmaceutical, chemical aerospace, and architecture. With its profound understanding of the applications Sefar helps its customers to achieve optimum results in their industrial processes. Sefar Oceania has been established in 1968 and it is a 100% Subsidiary of Sefar Switzerland. 6 sales regions cover Australia, New Zealand and the Pacic Rim. With over 55 employees and manufacturing facilities in Australia and New Zealand we are the most diverse Mesh & Filter Products solution provider from a single supplier.

#### Australia & New Zealand

Head Office OceaniaWANew ZealandSefar Pty LtdSefar Pty LtdSefar Ltd19-21 Huntingwood DriveUnit 4 , 68 Callaway Street24G Allright PlaceHuntingwood NSW 2148Wangara WA 6065 AustraliaMt Wellington, AKL 1060

Phone +61 1300 306 661 Ph +61 8 9303 2600 Ph +64 9527 4410 oceaniasales@sefar.com saleswa@sefar.com salesnz@sefar.com www.sefar.com.au www.sefar.nz

