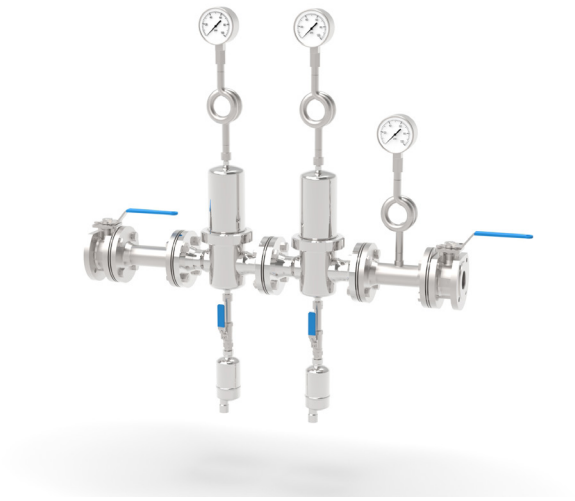
Donaldson
FILTRATION SOLUTIONS

PROCESS FILTRATION
STEAM MANIFOLDS FOR CULINARY & PROCESS STEAM

System Engineered Solutions

GLOBAL STEAM MANIFOLD (DIN)



COMPONENTS AND DESIGN

Donaldson steam manifolds provide a ready-to-install steam solution with housings, condensate traps, lockable isolation valves, and upstream and downstream pressure gauges. Mounting stands with leveling feet and housing jackets are also available.

ALL-IN-ONE STEAM SOLUTION

Improved steam quality ensures increased process efficiency and longer service life of downstream filters being sterilized. Culinary steam is free of entrained contaminants and suitable for use in direct contact with food products or product contact surfaces.

ASSOCIATED FILTER ELEMENTS

The following elements are recommended with the Donaldson Steam Manifolds:

Stage 1 - 25 µm Donaldson LifeTec™ P-GSL N filter element acting as an entrainment separator

Stage 2 - 5 µm Donaldson LifeTec™ P-GSL N or 1 µm Donaldson P-GS element acting as a particulate filter

FEATURES AND BENEFITS

- Minimal site assembly
- Compact design
- Minimal installation downtime
- Ergonomic housing heights
- Low differential pressure drop
- High flow rate capabilities
- Long service life
- Manual pressure indication

INDUSTRIES

Process steam is used as a source of energy for many process applications like heating and temperature control whereas culinary steam is used specifically for food processing and direct product contact applications.

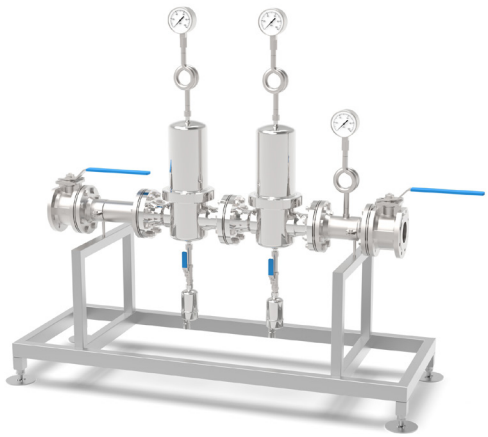
- Bottled Water

- Dairy

- Breweries

- Wineries

DIN STEAM MANIFOLD WITH STAND



Donaldson LifeTec™

QUALITY TESTING

All products have been inspected and meet the following requirements by Quality Assurance:

- Framework according to European Regulation (EC) 1935/2004
- FDA requirements for contact with food in accordance with the Code of Federal Regulations, Title 21
- Minimum internal surface finish of Ra < 1.6 µm (< 64 µin)

PRODUCT SPECIFICATIONS	
Max Operating Temperature	Culinary: 150 °C (302 °F), Process: 180 °C (356 °F)
Max. Operating Pressure	10.3 barg (150 psig)
Max. Differential Pressure	Defer to element datasheets
Components	Manometers Isolation ball valves Optional support stand, housing jackets
Internal surface finish [Ra]	Ra < 1.6 µm (< 64 µin)
Materials	All product contact surfaces Stainless Steel EN 1.4404 (AISI 316L) or EN 1.4301 (AISI 304) Elastomers are made of EPDM (Culinary) or PTFE/Fluoraz (Process)
Inlet/Outlet	DIN Flanges, 1/2 IN BSP Drains and Vents

PRODUCT CAPACITIES

Manifold filter housings are designed for the purification of industrial and culinary steam and yield low differential pressure at high flow rates. See estimated manifold capacities below. Detailed sizing curves are also provided on the following pages.

MANIFOLD CAPACITIES				
LINE SIZE	**PART NO.**	**DESCRIPTION**	**FLOW (KG/H)**	**FLOW (LB/H)**
DN 25 (1 IN)	AG1363601	MANIFOLD, CULINARY STEAM, DN 25, PN 10	200	440
DN 50 (2 IN)	AG1363801	MANIFOLD, CULINARY STEAM, DN 50, PN 10	500	1100
DN 80 (3 IN)	AG1363901	MANIFOLD, CULINARY STEAM, DN 80, PN 10	1200	2645
DN 25 (1 IN)	AG1399201	MANIFOLD, PROCESS STEAM, DN 25, PN 10,	200	440
DN 50 (2 IN)	AG1399301	MANIFOLD, PROCESS STEAM, DN 50, PN 10	500	1100
DN 80 (3 IN)	AG1399401	MANIFOLD, PROCESS STEAM, DN 80, PN 10	1200	2645

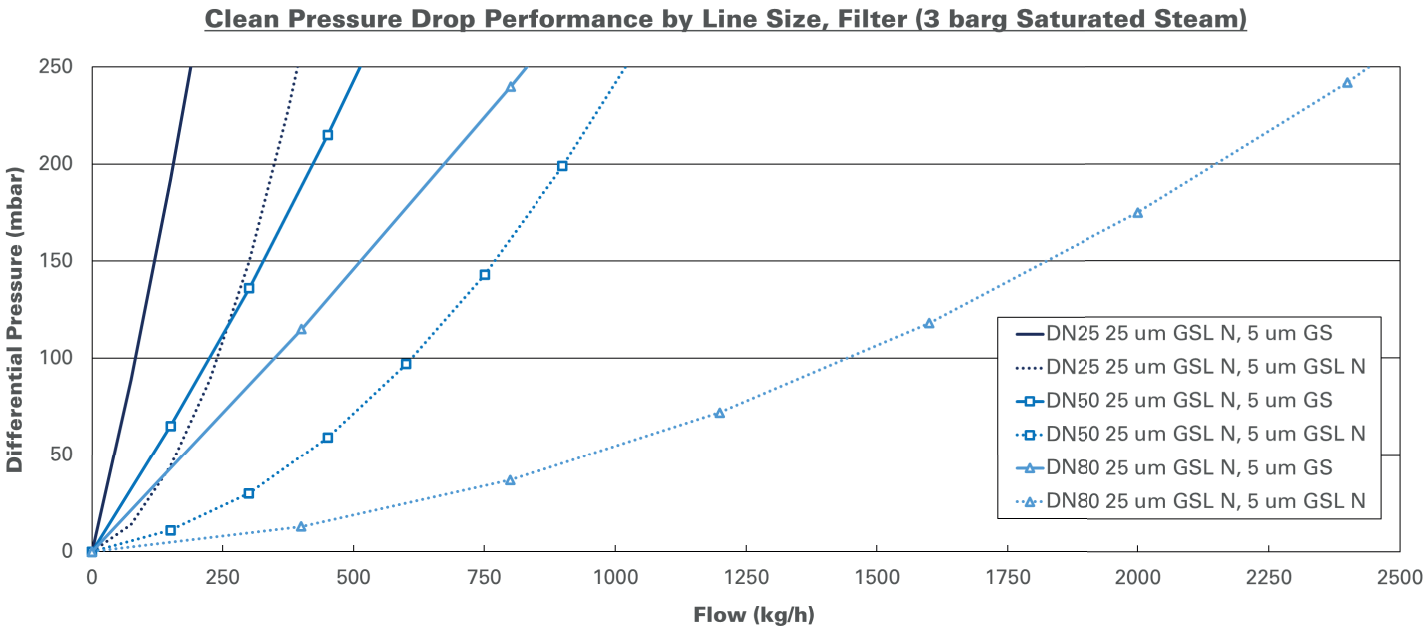
*Capacities approximated using 3.4 barg (50 psig) system pressure

FLOW CHARACTERISTICS

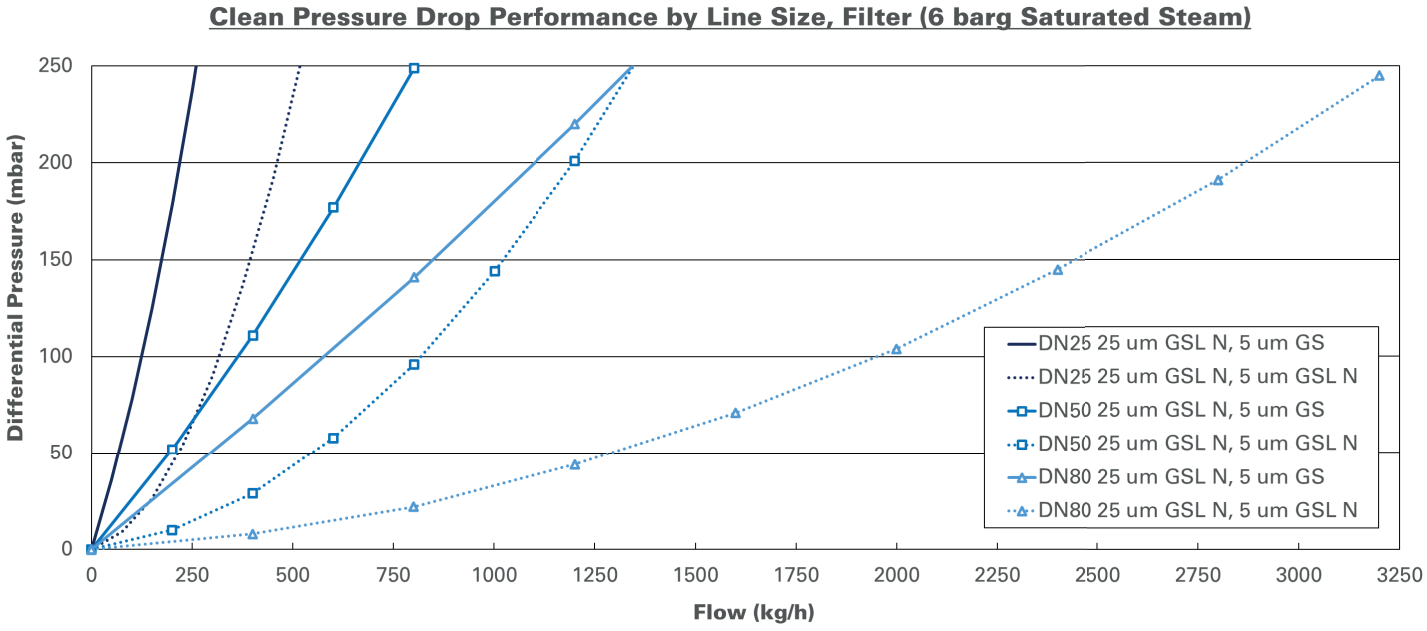
Estimated flow characteristics using Donaldson housings and typical filter element configuration with saturated steam.

TYPICAL ELEMENT CONFIGURATION		
MANIFOLD	STAGE 1	STAGE 2
Configuration A	25 µm P-GSL N	5 µm P-GSL N
Configuration B	25 µm P-GSL N	5 µm P-GS

FLOW CHARACTERISTICS AT 3 BARG



FLOW CHARACTERISTICS AT 6 BARG

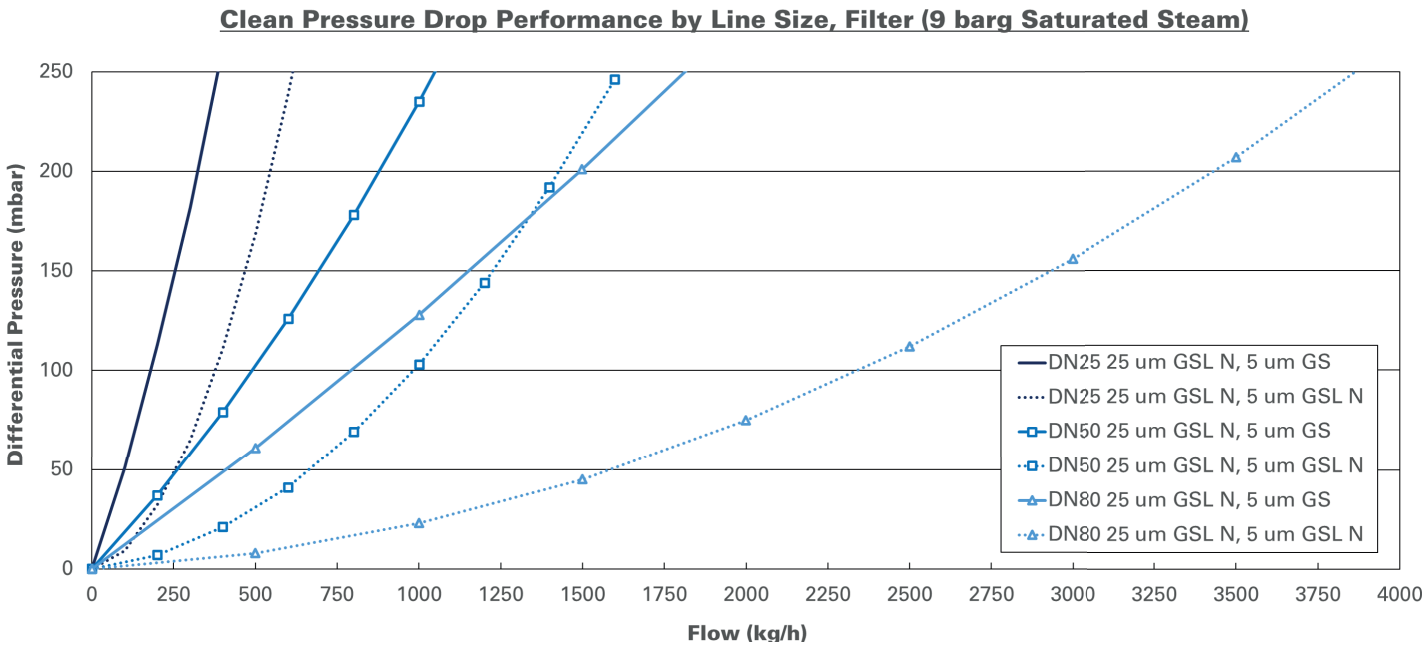


FLOW CHARACTERISTICS CONTINUED

Estimated flow characteristics using Donaldson housings and typical filter element configuration with saturated steam.

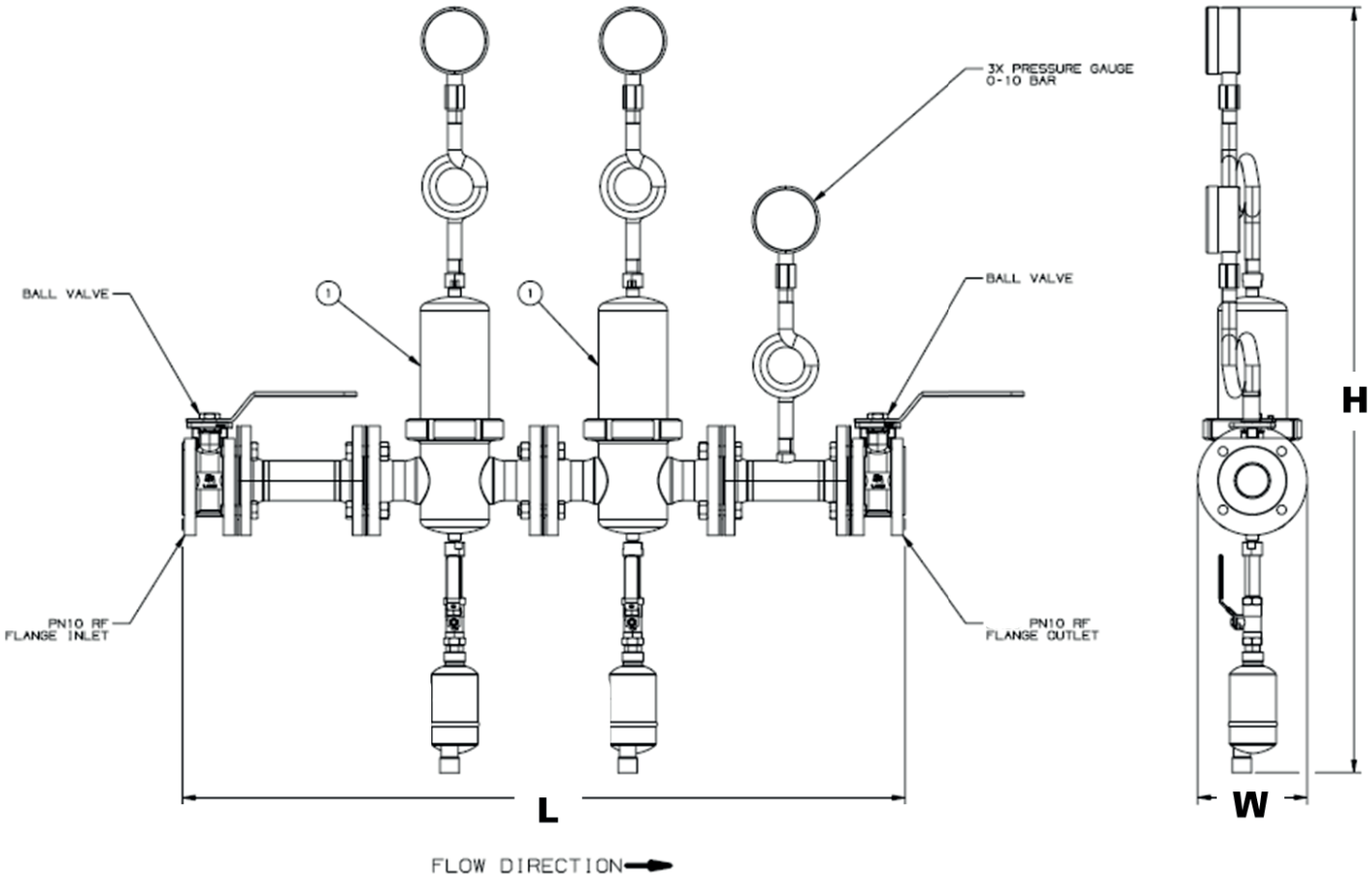
TYPICAL ELEMENT CONFIGURATION		
MANIFOLD	STAGE 1	STAGE 2
Configuration A	25 µm P-GSL N	5 µm P-GSL N
Configuration B	25 µm P-GSL N	5 µm P-GS

FLOW CHARACTERISTICS AT 9 BARG



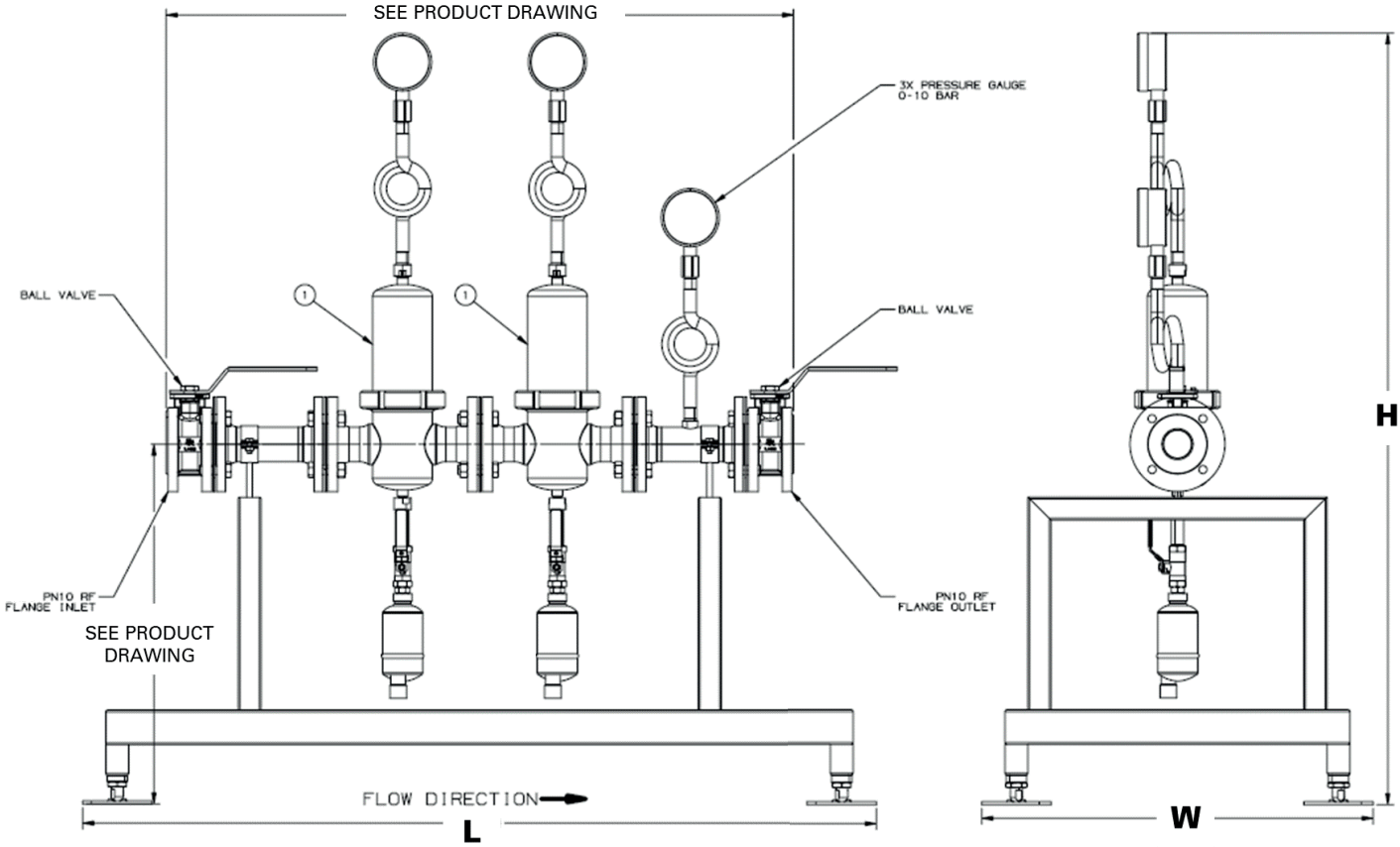
WEIGHTS AND DIMENSIONS – MANIFOLD WITHOUT STAND

GLOBAL STEAM MANIFOLD WEIGHTS AND DIMENSIONS											
LINE SIZE	PART NUMBERS CULINARY (PROCESS)	ELEMENT SIZE, QTY		WEIGHT		LENGTH		WIDTH		HEIGHT	
		Stage 1	Stage 2	kg	lb	mm	in	mm	in	mm	in
DN 25 (1 IN)	AG1398201 (AG1399201)	UF 05/20 Qty 1	UF 05/20 Qty 1	52	115	877	34.5	132	5.2	1062	41.8
DN 50 (2 IN)	AG1398301 (AG1399301)	UF 07/30 Qty 1	UF 07/30 Qty 1	77	170	1091	43.0	165	6.5	1156	45.5
DN 80 (3 IN)	AG1398401 (AG1399401)	UF 10/50 Qty 1	UF 10/50 Qty 1	124	275	1446	56.9	210	8.3	1286	50.6



WEIGHTS AND DIMENSIONS – MANIFOLD WITH STAND

GLOBAL STEAM MANIFOLD WITH STAND WEIGHTS AND DIMENSIONS											
LINE SIZE	PART NUMBERS CULINARY (PROCESS)	ELEMENT SIZE, QTY		WEIGHT		LENGTH		WIDTH		HEIGHT	
		Stage 1	Stage 2	kg	lb	mm	in	mm	in	mm	in
DN 25 (1 IN)	AG1363601 (AG1398701)	UF 05/20 Qty 1	UF 05/20 Qty 1	62	137	1100	43.3	600	23.6	1265	49.8
DN 50 (2 IN)	AG1363801 (AG1398801)	UF 07/30 Qty 1	UF 07/30 Qty 1	88	194	1300	51.2	600	23.6	1342	52.8
DN 80 (3 IN)	AG1363901 (AG1398901	UF 10/50 Qty 1	UF 10/50 Qty 1	138	304	1600	63	600	23.6	1490	58.7



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FILTRATION SOLUTIONS

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Contact us