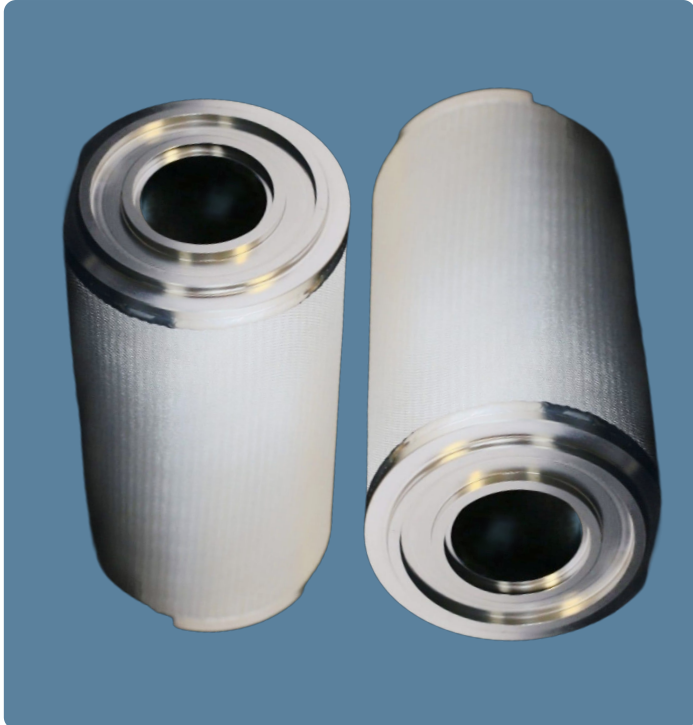


Datasheet TechSteel-S

All stainless steel filter elements

TechSteel-S filter cartridges are engineered for demanding filtration duties where mechanical strength, chemical resistance, and thermal stability are essential. Designed for harsh industrial environments, these cartridges provide reliable, long term performance without compromise.



Features & Benefits

- Manufactured from SS316L as standard, but also available in SS304 as an option
- Fully welded throughout. TIG welded media seams ensure high strength and integrity
- No glues or resins used in the construction ensuring excellent compatibility with aggressive process fluids and elevated operating temperatures
- Available with a wide range of endcap types
- Available in either pleated format or cylindrically wrapped format
- Temperature range from -150 °C up to +300 °C
- Maximum differential pressure up to 25 bar (higher ratings available on request)
- 100% bubble point tested prior to shipping
- Available with sintered steel fibre (absolute Beta 5000), sintered steel mesh (nominal) or sintered porous powder media options.

Recommended Operating Conditions

Max differential Pressure		
Version	Pressure	Working Temperature
Pleated	20 bar	- 150 to + 300°C
Wrapped	6 bar	- 150 to + 300°C
Powder	10 bar	- 150 to + 300°C
Version	Surface Area (standard)	
Pleated	0.135 m ² /10"	
Wrapped	0.05 m ² /10"	
Powder	0.05 m ² /10"	

The performance of the gasket material is dependent on temperature

Applications

- Chemical processing
- Petrochemical and refining
- High temperature gas filtration
- Solvent and aggressive liquid filtration
- Reusable filtration systems

Filter Media Options

SSM – Stainless Steel Mesh

Nominal filtration from 3 to 840 microns. Mesh elements provide excellent flow rates and low pressure drop, making them a cost effective solution for coarse to medium filtration duties.

SSF – Stainless Steel Fibre

Absolute filtration grades of 1 to 200 microns. Fibre media offers high permeability, low differential pressure, and excellent contaminant holding capacity with an absolute beta rating of ≥ 5000 .

SSP – Sintered Stainless Steel Powder

Absolute filtration grades of 3 to 60 microns. While less permeable than fibre media, sintered powder elements provide superior mechanical strength and can withstand differential pressures up to 100 bar.

Cleaning & Service

TechSteel-S cartridges are designed for repeated cleaning and extended service life:

Reverse Flow Cleaning

Back-flushing with liquid or gas is effective when retained particles are larger than the media pore size. A reverse flow rate of at least twice the operating flow is recommended.

Ultrasonic Cleaning

Ultrasonic baths with suitable detergents can remove surface contamination; deeply embedded particles may require additional treatment.

Chemical Cleaning

Appropriate solvents, acids, or alkaline solutions may be used to dissolve process residues or hardened contaminants.

High-Temperature Burn-Out

Thermal cleaning may be possible for certain applications-consult Techno Filter for guidance.

Ordering information

Code	Micron rating (μm)	Length (inch)	Grade	End cap 1	End cap 2	Gasket	Type	Handling Cage
TFSS	1	5"	SSM -	A = Open	A = Open	E = EPDM	P = Pleated	No = Blank
	2	10	Stainless Steel Mesh	E = 222	E = 222	N = Nitrile	C = Cylindrical	Yes = HC
	3	20"	SSF -	F = 226	H = Spear	S = Silicone		
	5	30	Stainless Steel Fibre	Z = 224	G = Closed	T = FEP		
	10	40"	SSP -	T = Treaded		V = Viton		
	15	50"	Sintered Stainless Steel					
	25		Powder					
	30							
	40							
	50							
	75							
	100							
	150							
	200							

Example article code: TFSS5-40SSM-AAE-PHC

Example article description: TechSteel-S stainless steel mesh filter 5 μm 40" pleated DOE EPDM with handling cages

Disclaimer

Information provided is based on standard product data and is subject to change. Techno Filter B.V. is not liable for incorrect application or improper use of the product.