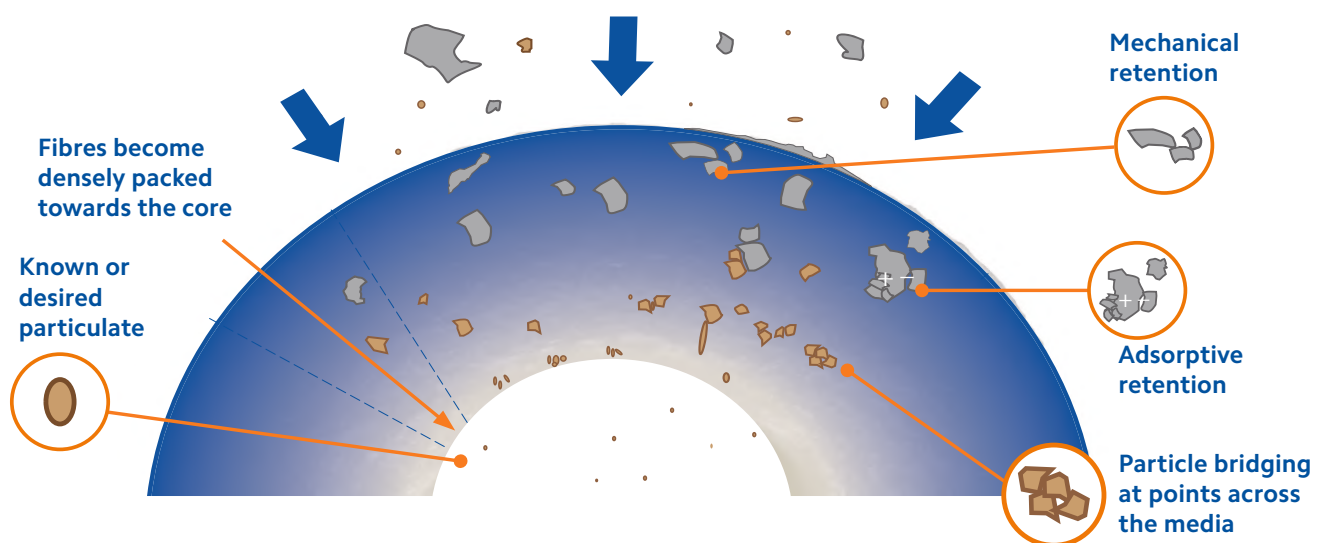


What is Depth Filtration?

Successfully used in a variety of applications, depth filtration utilises a thick layer of media to effectively trap and retain various particulate. Commonly specified as the first stage of a filtration cascade, more advanced manufacturing techniques have now developed depth cartridges suited to improving downstream filtration.

Cross-Section of a Depth Cartridge



How do Depth Filters Work?

As liquid from the inlet is sent twisting and turning on a tortuous path through the filter cartridge, particles become caught in the densely packed fibres of a depth filter - this sieving or interception is known as mechanical retention. With the introduction of graded-depth filtration, a broad range of particulate can be captured across the entirety of the depth media.

From outside to in, the media fibres become densely packed with larger particulate captured first, allowing smaller particles to be progressively intercepted. As well as the physical interception, fibres also naturally attract particles via Van de Waals force. This adhesion process is known as adsorptive retention.

Typical Applications

Depth filtration offers a myriad of solutions to suit many applications:

- Incoming water
- Pre-RO
- General pre-filtration
- Particulate removal
- High temperatures
- Aggressive solvents
- Food grade compatibility
- High viscosity liquids
- Adhesives
- Paints and inks

Technology Developments

For over 50 years, string wound cartridges have been used as a basic form of filtration. Development in manufacturing processes and technologies have resulted in more advanced cartridges with improved performance characteristics and capabilities.



Spun Bonded Fibres

Advanced range of solutions for efficient prefiltration or particulate classification

- The most popular option for sediment reduction
- More precise filtration over wound technology
- Particulate is retained throughout the depth of the filter media
- Increased void volume (available space for particulate to be retained) maximises dirt holding capacity
- Suitable for applications from batch process to drinking water

Wound String Fibres

Ideal for high temperature and chemical compatibility applications

- Tried and tested technology
- Cost effective particulate filtration
- Multiple options of filter media and core material
- Suitable for high temperature and aggressive chemicals
- Wide micron rating options from 0.5 to 150 micron

Specialist Materials

Ideal for high viscosity and high temperature applications

- Specially designed for more challenging applications
- Technologies applied to overcome high viscosity processes
- Products for superior performance in paint and ink applications
- Cartridges infused with antibacterial additives

Sediment Reduction for Chemicals



FDA
Compliant Materials

 **SPECTRUM**



Wound Cotton

1-100 micron

For applications with a higher operating temperature or where polypropylene is incompatible with the feed solution, the SWC cartridge provides graded particulate reduction and is supplied as standard with a stainless steel core for added strength. Due to the natural absorption properties of the cotton media, the SWC exhibits the ability to remove and retain dispersed oil making it suitable for use in degreasing applications.

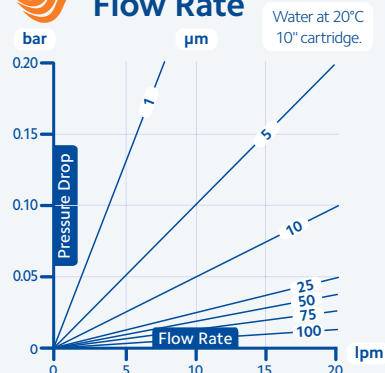


Key Features

- Stainless steel core for added support at higher temperatures
- Cotton media exhibits oils and other hydrocarbon reduction
- Manufactured from high quality bleached cotton for extended chemical compatibility



Flow Rate



Materials of Construction

Filter Media

Bleached Cotton

Core

304L Stainless Steel
(as standard) Polypropylene



Configurations

Micron (µm)

1 5 10 25 50 75 100

Length (")

10 20 30 40

Core

Blank = Stainless Steel P = Polypropylene



Specification

Efficiency

65%

Max. Operating Temperature

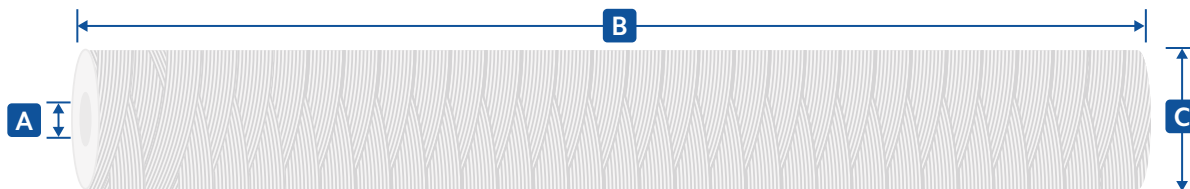
80°C (Polypropylene core)
120°C (304L Stainless Steel core)

Max. Operating Pressure Differential

1.4 bar at 80°C (Polypropylene Core)
1.4 bar at 120°C (Stainless Steel Core)



Dimensions



	Dimensions (mm)		
	A	B	C
10	28	254	63
20	28	508	63
30	28	762	63
40	28	1016	63

Part Number

Code	Micron	Length	Core
SWC	1, 5, 10, 25, 50, 75, 100	10, 20, 30, 40	(Stainless Steel)
		10	P (Polypropylene)

e.g. SWC-5-10