

SupaSpun II SRP

Absolute Rated Depth Cartridge



Injection of seawater is often necessary to maintain reservoir pressure and increase the recovery factor in oil production. Sulphate Removal Processes (SRP) are used on water for injection to prevent scaling of the formation caused by sulphates reacting with barium and strontium in the crude oil. Removal of the sulphates will also reduce the risk of reservoir souring.

Nano membranes used in the SRP require effective prefiltration to avoid premature fouling and ensure long life for these systems. Amazon Filters Ltd have developed absolute rated **SupaSpun II SRP** cartridges specifically for the Sulphate Removal Process. Their use can maximise membrane life, reduce replacement costs and avoid unexpected interruptions to the process.

SupaSpun II SRP precision graded density filter elements are a further development of our already well proven absolute rated depth type filter. These high-performance cartridges are designed to incorporate a significant graduation of pore size throughout the depth of the media. The more open pores found in the outer layers provide excellent prefiltration and the absolute rated inner layer provides reliable protection of the membrane system downstream.



Therefore, **SupaSpun II SRP** provides a unique combination of high dirt holding and reliable performance under varying seawater conditions. They are designed to cope better than traditional cartridge filters with seasonal algal blooms and the adverse effects of storms and currents stirring up sediments from the seafloor.

Absolute Rated Filter Media

SRP membrane suppliers set demanding specifications for the pretreatment of the seawater to be processed. This includes removal of particulates that will foul the membrane prematurely. **SupaSpun II SRP** filters are manufactured to provide absolute ratings and therefore unlike nominal filters maintain removal efficiency for contaminants throughout the lifetime of the filter and under varying process conditions. It is typical for nominal filters to suffer reduced removal efficiency or to unload previously retained contaminants after a period of use. This can result in unexpected membrane fouling and interruption to the sulphate removal process and water supply.

Unique Construction

SupaSpun II SRP fibres are blown continuously onto a central support core, with fibre diameters controlled to produce different pore sizes throughout the extrusion process. All the layers are inter-linked to offer maximum support while ensuring that the high void volume is maintained, but with increasing fibre density towards the cartridge central core - therefore resulting in true depth filtration. Cartridges are available in a range of absolute micron ratings.

Features and Benefits

- Absolute removal ratings providing consistent and reliable SRP membrane protection throughout the filter's life
- Optimised graded density structure designed to provide maximum life under varying seawater conditions (e.g. algal blooming or disturbed sediments)
- Increased void volume giving high flow rates and low initial pressure losses
- Option of **Advantage** grade featuring moulded end caps and rigid outer support cage
- All individual packing bags are anti-static



System Engineering

Amazon Filters have particular strength in the design and manufacture of filter housings for the critical demands of the Oil and Gas industry. We have extensive experience in the manufacturing of vessels in Duplex (UNS S31803) and Super-Duplex (UNS S32750/60) stainless steels.

Our design team is fully conversant in the increasing technical demands of pressure vessel design codes, and we have onshore and offshore installations in service worldwide.



SupaSpun II Technical Data

Dimensions

Outside Diameter:	64mm
Core Diameter:	28mm
Length	5": 125mm
	9.75": 251mm
	10": 254mm
	13": 332mm
	20": 508mm
	30": 762mm
	40": 1016mm
	60": 1524mm

Maximum Operating Conditions

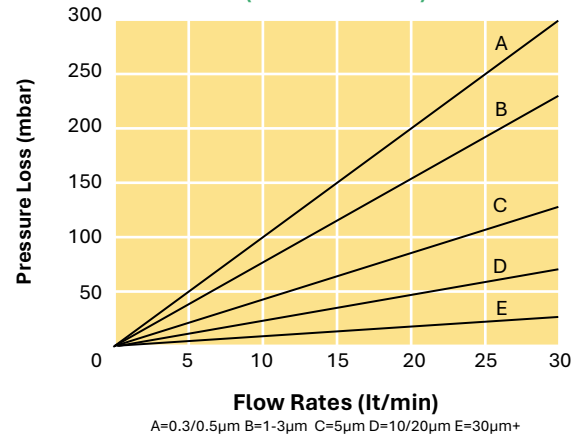
Temperature	04PP:	80°C
	04PD:	100°C*1
	04PS:	100°C

*1 Applies to single open end cartridges only. For all steaming and hot water applications, the Reinforced Polypropylene End Cap option must be used (PP Only)

Recommended change-out differential pressure: 2.5 Bar

Maximum ΔP	PP Media PP Core	PP Media Reinforced PP Core	PP Media St. St Core
@ 20°C	4.0	4.0	4.0
@ 50°C	1.5	4.0	4.0
@ 80°C	0.25	2.4	4.0
@ 100°C	-	1.5	4.0

Flow Rates for Water
(10" PP Element)



This product is made from a sustainable source of polypropylene.

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