SUPAPLEAT HFC SRP



Absolute Rated Pleated Filter

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 Limited have developed the high efficiency SupaPleat HFC SRP large diameter cartridges specifically for the Sulphate Removal Process. Their use can maximise membrane life, reduce replacement costs and avoid unexpected interruptions to the process. SupaPleat HFC SRP high surface area cartridges utilise pleated depth media technology and Amazon's in-house development has optimised the pleat pack ensuring pressure losses are low, dirt capacity is high and rigidity is maintained at all flow rates. Therefore SupaPleat HFC SRP filters provide a unique combination of high dirt holding and reliable performance under varying fresh and seawater conditions.

High Efficiency Filter Media

SRP membrane suppliers set demanding specifications for the pretreatment of the seawater, prior to processing. This includes removal of particulates that will foul the membrane prematurely. SupaPleat HFC SRP filters are manufactured with a high efficiency media that is designed to maintain removal efficiency for contaminants throughout the life time of the filter and under varying process conditions. Using SupaPleat HFC SRP filters can help avoid unexpected membrane fouling and interruption to the Sulphate Removal Process and water supply.

Product Features

SupaPleat HFC SRP filters are produced using a state of the art manufacturing process resulting in the following features:

- High surface area, resulting in low clean ΔP and excellent dirt holding capacity
- 100% thermally welded construction for maximum integrity and strength, up to 1541mm (60")
- Internal support core for resistance to back pressure



Amazon Filters manufacture a comprehensive range of filter housings for the SupaPleat HFC SRP filter cartridges. Available in many materials and sizes to suit all flow rates, please consult our sales office for further details on our full range.

Features and Benefits

- Specifically designed for Sulphate Removal Processes
- Polypropylene media with optimised pleat geometry for high flow and high dirt capacity, providing maximum life under varying seawater conditions
- Absolute removal ratings providing consistent and reliable SRP membrane protection throughout the filters life
- Low maintenance fewer number of cartridges to change-out
- All individual packing bags are anti static

Industries and Applications

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, and are registered suppliers on both FPAL and Achilles Oil and Gas industry schemes. 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.



SupaPleat HFC SRP Technical Data

Dimensions

Outside Diameter: 160mm
Core Diameter: 75mm
Typical Surface Area: 4m²

Length: 40": 1038mm

60": 1541mm

Maximum Operating Conditions

Temperature: 80°C

Recommended Maximum Differential Pressure: 1.5 Bar *1

| Maximum ΔP | PP media |
|------------|----------|
| @ 20°C | 3.4 |

¹¹ Amazon Filters recommend that SupaPleat HFC SRP cartridges are changed at a differential pressure of 1.5 bar in normal service - the operating conditions above should be treated as maximum differential pressures for short term use without causing cartridge collapse problems.

Product validation guide available on request. All SupaPleat HFC SRP cartridges are manufactured under strict control with batch number identification, giving full traceability on all components.





180

150

120

60

0

Pressure Loss (mbar)

Flow Rates For Water (40" Element)

PP Flow Rates (m³/hr)
A=0.5µm B=1.0µm C=3-6µm D=10µm+



AMAZON FILTERS LTD.

Albany Estate, Camberley, Surrey, GU16 7PG, ENGLAND

Tel: +44 (0) 1276 670 600 Email: sales@amazonfilters.co.uk Web: www.amazonfilters.com