

BorsoPleat-HF



Absolute Rated High Flow Cartridge

A wide range of absolute rated cartridge filters from Van Borselen Filters, featuring the latest developments in filter media technology, **BorsoPleat-HF** cartridges are based on a robust construction, offering removal ratings from 0.5 to 100 micron absolute, rated 99,98%.

BorsoPleat-HF High-Flow high surface area cartridges utilise pleated depth media offering maximum efficiency and exceptionally high flow capabilities. Developed to suit industrial processes where high performance is required, the low pressure loss and high dirt capacity makes it the ideal choice for fine polishing applications.

In-house developments have optimised the pleat pack ensuring rigidity is maintained at all flow rates.

The unique design of the **BorsoPleat-HF** cartridges helps to achieve lower running costs and a smaller process footprint.

The **BorsoPleat-HF** are also highly resistant to integrity failure caused by steam sterilisation and have excellent chemical compatibility characteristics.

They are suitable for applications ranging from bioburden reduction and the clarification of a wide range of process liquids and end products.



Features and Benefits:

- **Guaranteed removal ratings**

BorsoPleat-HF cartridges are validated using the recognised industry standard modified OSU-F2 single pass test to Beta 5000 (99.98% efficiency).

- **Suitable for steam and hot water sanitisation**

BorsoPleat-HF cartridges are resistant to repeat steam sterilisation up to 135°C (275°F) and hot water cycles at up to 90°C (194°F).

- **Full traceability**

All **BorsoPleat-HF** cartridges are identified with a batch serial number. Each **BorsoPleat-HF** cartridge is supplied with a Certificate of Quality and an operating instruction leaflet.





Specifications

Materials of Manufacture

Filter media:	Polypropylene Fiber Glass Polyester Cellulose Stainless Steel
End fittings:	Polypropylene SS/PP
Inner core:	Polypropylene Stainless Steel
Outer support:	Polypropylene Stainless Steel
Support ring:	Stainless steel

Cartridge Dimensions

Diameter:	165mm (6.25")
Length:	508mm (20") 990mm (39") 1016mm (40") 1524mm (60") 2032mm (80")

Effective Filtration Area

Up to 13m² per 40".

Cartridge Treatment

Standard: Cleaned without further treatment.
Flushed: Flushed with pyrogen-free water.
Rinsed: Ultra-clean, pulse flushed to give a system resistivity of 18MΩ.cm.

Gaskets and O-Rings

Ethylene Propylene, FEP encapsulated, Silicone, Viton®, Nitrile available.

Operating Temperature

Maximum continuous: 83°C (176°F)
for full PP cartridges.
other materials can operate on higher temperatures.

Foodgrade approved

FDA 21 CFR 177.1520
FDA 21 CFR 177.2600
EC 10/2011

Sterilisation

In situ steam 80 x 30 minute cycles at 135°C (275°F).
Hot water 200 x 20 minute cycles at 85-90°C (185-194°F).

Extractables

Minimum total extractables. Please refer to the [BorsoPleat-HF Validation Guide](#).

Integrity Testing

[BorsoPleat-HF](#) filter cartridges are batch tested for integrity using the Bubble Point Test.

Cartridge Construction

The high quality robust construction of [BorsoPleat-HF](#) cartridges, allows for excellent chemical compatibility with a wide range of fluids.



Applications

BorsoPleat-HF cartridges provide absolute filtration where reproducibility and consistency of performance are critical.

Suitable for the filtration of aqueous and organic liquids, **BorsoPleat-HF** cartridges can be used as prefilters or final filters in the following applications:

- **Pharmaceuticals and Bioprocessing**

The structure of the filter media makes it ideally suited for the filtration of complex fluids.

- **Foods and Beverages**

The clarification of beers, wines and spirits to a clear and bright finish without affecting taste or colour. Provides an alternative to plate and frame and other sheet formatted depth filters.

- **Process Water**

The filtration of process water installations for removal of general contamination and resin fines.

- **Fine Chemicals**

The filtration of high grade chemicals including solvents, reagents, photographic emulsions, inks, paints and plating solutions.

- **Cosmetics**

The clarification of process water and intermediates for the finished product.





Additional Information

Range

Van Borselen Filters Supplies a full range of filtration products: e.g.:
 Filtercartridges (Meltblown/ Membranes/ Activated Carbon)
 Filter housings, Filterbags, Lenticular Module Filters, Self Cleaning
 Filters, Filter Sheets, Sieving Machines, Porous Sintered Metal,
 Oilskimmers, Strainers and many more..

Material Conformity and Validation

The bio-safety of all materials used in the manufacture of **BorsoPleat-HF** cartridges is assured by FDA approval to Title 21CFR.177. and EC 10/2011

Chemical Compatibility

The **BorsoPleat-HF** materials of construction are compatible with a wide range of chemicals and solvents, however care must be taken to select the appropriate seal material. Advice on chemical compatibility is available. Since operating conditions vary considerably between applications, verification by the end user is recommended.

Quality control

Our factories are all located in Western Europe and are accredited to ISO 9001-2008.

All our filters are fully traceable and manufactured under clean room conditions.

Engineering capacities

One of our strengths is developing filter vessels for critical applications in the chemical industry.

We have a wide experience in supplying filter vessels, like Duplex (UNS S31803), Super-Duplex (UNS S32750/60), Titanium, RvS316L, CS (optionally with a coating or lining).

Our filter vessels comply with the necessary design codes (ASME VIII, EN13445, U-stamp and PD5500) and comply to ATEX and PED 97/23/EC standards. Both liquids and gasses PED classes I, II, III, IV, all modules



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