

# Sintered Felt Candle Filter

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# **Brochor**Brochure



# We offer a variety of sintered felt candle filters to meet your filtration requirements of various chemical processes.

Sintered felt candle filter is made of stainless steel (304, 316L, etc.), FeCrAl and other metal fibers with a diameter of micro rating by sintering in high temperature and welding after special non-woven laying and laminating. Multilayer sintered felt is composed of different pore size layers to form gradient and deliver higher porosity, permeability, filter rating and dirt holding capacity than single layer sintered felt. It can be pleated to increase the filter area and improve the filtration efficiency.

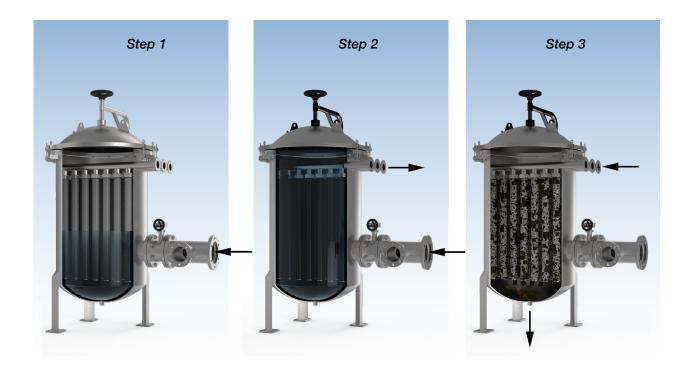
Sintered felt candle filter plays an important role in the filtration applications of various industries due to its precise filter rating.

# Sintered Felt Candle Filter



# **Working Principle**

The filtrate enters at the bottom of the filter and moves upward, which helps to keep the solids in suspension so that they are evenly deposited on the surface of the filter elements. Impurities are retained on the surface of filter elements, and clean filtrate is discharged from the filter through the register. When the filter reaches the set pressure value, the control system stops feeding and the residue liquid in the filter is drained out. The backblowing begins. When the backblowing is finished, the dry cake is discharged from residue discharge nozzle. Close the residue discharge nozzle when the dry cake discharging is finished. The surface of the filter elements is clean and ready for the next round of filtration.





# **Shape Type**



### Cylindrical Sintered Felt Candle Filter

- The finished products do not need additional outer protection layer or inner support layer
- Easy to clean
- Compared with pleated candle filter, it features simple processing and low costs.
- Broad availability

### Pleated Sintered Felt Candle Filter

- It typically offers 3–5 times the filter area of a cylindrical candle filter for longer runtime.
- Enhanced dirt holding capacity.
- Increased surface area helps to reduce pressure drop.
- Can be cleaned and reused up to 20 times



# SINTERED FELT CANDLE FILTER

# **Connection Type**

- ► Standard connection (such as, 222, 226, etc.)
- ► Quick opening connection
- **DOE**
- ► Thread connection (M20, M30, internal thread)
- Customized connection



226 connector



DOE



Internal thread



Customized connector

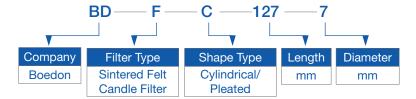
# **Specification**

Material: stainless steel (304, 316L, 314, etc.), FeCrAl, etc. Max. operating temperature: 600 °C; FeCrAl: 1000 °C.

Filter rating: 1–60 µm

Porosity: about 85%

Max. differential pressure: 6.9 MPa



# Popular Specifications of Sintered Felt Candle Filter

Model	Size				Filter Area	
	Length		Diameter		ft²	m²
	inch	mm	inch	mm	" ,	""
BD-F-C-127-7	5	127	2.76	70	0.32	0.03
BD-F-P-127-7	5	127	2.76	70	1.10	0.10
BD-F-C-254-7	10	254	2.76	70	0.64	0.06
BD-F-P-254-7	10	254	2.76	70	2.14	0.20
BD-F-C-508-7	20	508	2.76	70	1.17	0.11
BD-F-P-508-7	20	508	2.76	70	3.84	0.36
BD-F-C-762-7	30	762	2.76	70	1.82	0.17
BD-F-P-762-7	30	762	2.76	70	5.98	0.56
BD-F-C-1016-7	40	1016	2.76	70	2.35	0.22
BD-F-P-1016-7	40	1016	2.76	70	7.80	0.73

### Notes:

- 65 mm, 80 mm, 110 mm and other diameter sizes are available upon request;
- Length can also be customized upon request.

# Sintered Felt Candle Filter Filtration Performance

Absolute Filter Rating (μm)	Bubble Point Pressure (Pa)	Average Air Permeability (L/dm²/ min)	Thickness (mm)	Weight (g/m²)	Porosity (%)	Dirt Holding Capacity (mg/cm²)
3	12300	9	0.35	975	65	6.40
5	7600	34	0.34	600	78	5.47
7	5045	57	0.27	600	72	6.47
10	3700	100	0.32	600	77	7.56
15	2470	175	0.37	600	80	7.92
20	1850	255	0.49	750	81	12.44
25	1480	320	0.61	1050	79	19.38
30	1235	455	0.63	1050	79	23.07
40	925	580	0.66	1200	77	25.96
60	630	1000	0.70	750	87	33.97



# **Features & Application**

# **Features**

- Higher dirt holding capacity, longer replacement cycle
- Working at 600 °C for long term operation
- High porosity, good air permeability, low differential pressure
- High strength, good high temperature and corrosion resistance
- Good regeneration capacity and can be repeatedly washed and used
- Easy processing, forming and welding

# **Application**



## Chemical

- Feed solution impurities removal and filtration
- Catalyst recovery



# **Pharmaceutical**

- Material decarbonization, decolorization and precision filtration
- Sterile air preparation and steam filtration



## Oil & Gas

- Petroleum products terminal filtration, etc.
- Polymer filtration, etc.



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