

# Hall Pyke

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**High Flow Filters**

**High Flow**

**The SMART choice for filtration**

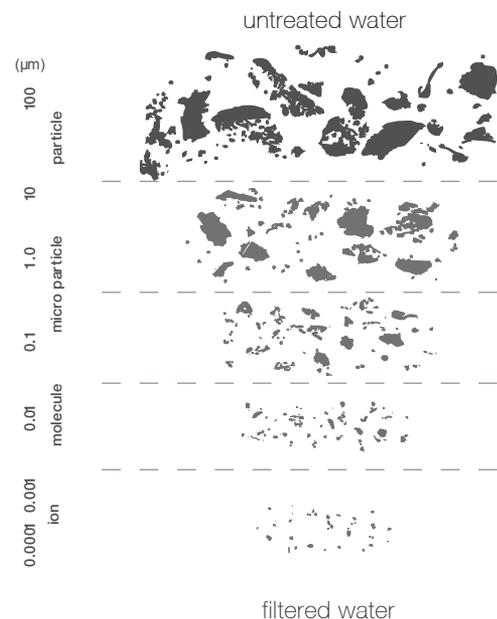
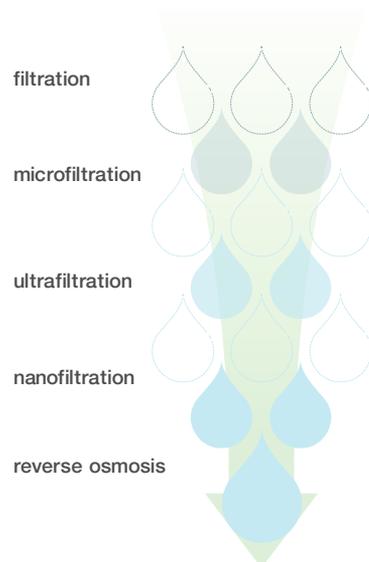
Cobetter High Flow Filter is a large diameter, single open ended pleated cartridge filter. With a 6"/152mm diameter, large filtration area, and high flow rate up to 90m<sup>3</sup>/hr. It can be widely used in a wide variety of industry with less downtime for change-out.

### Features and Benefits

- High density pleated filter type resulting in a high filtration area, high flow rates, longer service life, and high dirt holding capacity.
- Multi-layered design provides gradient filtration.
- Internal PP core guarantees no distortion and resists higher reverse differential pressure.
- Ergonomically designed handle facilities fast and easy installation and remove without special tools.



<b>Industrial</b>	Municipal Water, Pre-RO Filtration, Reclaimed Water, Coolants, Nozzle Protection, Boiler Condensate
<b>Chemical</b>	Quench Water, Aqueous Salt Solutions, Final Products
<b>Petrochemicals</b>	Water-flooding, Produced Water, Enhances Oil Recovery, Completion Fluids, Amine Sweetening, Final Products
<b>Electronics</b>	Pre-RO Filtration, Process Water
<b>Food &amp; Beverage</b>	Process Water
<b>Pharmaceutical</b>	Process Water



## Materials of Construction

Filter Media	Support/Drainage	End Caps	Core	Outside Material
PP Pleated Polypropylene depth structure	Polypropylene	Glass filled polypropylene	Polypropylene	PP Cage (HFPP150 Series)
GF Rein bonded glass fiber /Polyester support	Polyester			PET Net (HF150 Serie)

## Recommended Operating Conditions

Max. Temperature	PP: 80°C
	GF: 121°C
Max. Pressure	0.40 Mpa/21°C HFPP150 (PP Cage)
	0.38 MPa/21°C HF150 (PET Net)
	0.15 MPa/80°C

## Flow Rate

Length	Design Flow Rate	Max Flow Rate
20"	15 m³/h	30 m³/h
40"	30 m³/h	60 m³/h
60"	45 m³/h	90 m³/h
80"	60 m³/h	120 m³/h

## Retention Ratings

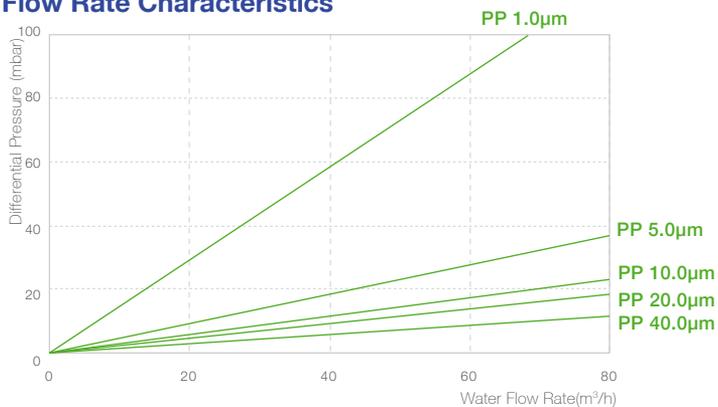
Polypropylene (PP)	1.0, 2.0, 5.0, 10, 20, 40, 70, 90µm
Glass Fiber (GF)	0.8, 1.0, 3.0, 5.0, 15, 25µm

## Retention Characteristic

Particle Size	Filtration Efficiency HF150NB						
	PP0.8	PP1.0	PP2.0	PP3.0	PP5.0	PP10.0	PP20.0
≥1µm	99.89%	99.82%	95.00%	86.97%	79.86%	42.23%	24.38%
≥2µm	99.97%	99.87%	98.64%	96.84%	90.09%	70.49%	40.09%
≥5µm	100.00%	99.93%	99.90%	98.86%	98.36%	82.26%	76.66%
≥8µm	100.00%	100.00%	99.97%	99.20%	98.88%	95.25%	82.60%
≥10µm	100.00%	100.00%	100.00%	99.58%	99.39%	98.18%	89.42%
≥12µm	100.00%	100.00%	100.00%	99.78%	99.57%	98.76%	97.41%
≥25µm	100.00%	100.00%	100.00%	100.00%	100.00%	99.34%	99.14%

Remarks: The testing particle is made by mixed solution of standard silica .

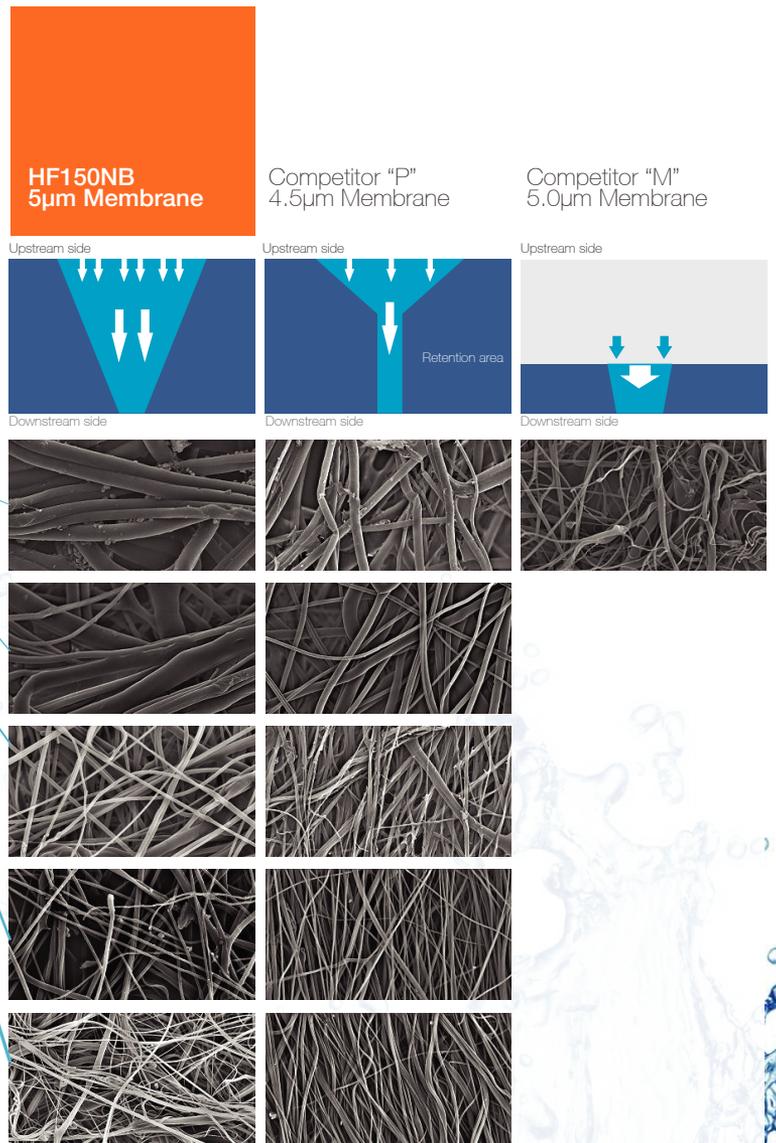
## Flow Rate Characteristics



Test Criteria: Single filter (60inch length) cartridge, water at 20°C.



# Performance Comparison Table I



Membrane Area-40"	5.6 m <sup>2</sup>	5.16 m <sup>2</sup>	12 m <sup>2</sup>
Membrane Thickness	2.2 mm	2.2 mm	0.8 mm
IPA Velocity Time (@-0.005Mpa/50mlIPA)	11.2 s	12.78 s	5.67 s
Efficiency 0.5-2.0µm particle	99.1%	99.3 %	11.79 %
Service Life (by Hangzhou city water)	325.43 L	272.25 L	164.5 L

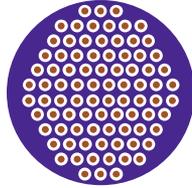
## Performance Comparison Table II

### Filters Quantities vs Same Filter Capacity

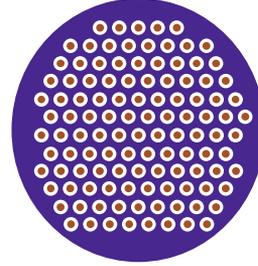
150m<sup>3</sup>/h



**High Flow  
Filtration System**

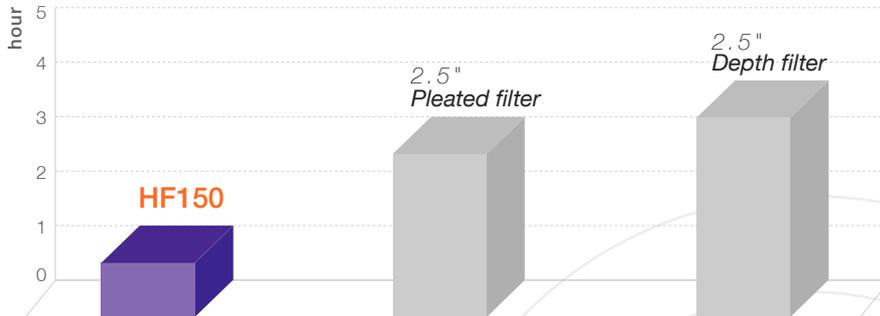


*Pleated Cartridge  
Filtration System*



*Depth Filter System*

### Change-Out Time



Reduce the number of filters by 90%,  
Decrease the volume of housing by 50%,  
Easier operation and change-out.

## End Cap Configuration

 HF150NB	 HFM150	 DSHF150
 HFPP150	 G1HF150	
 N1HF150	 N2HF150	 N3HF150
 N4HF150	 N5HF150	 JL-150

## Ordering Information

	Filter Media	Efficiency Rate		Length	Seal
HFPP150 (PP Cage)	PP	0050=0.5µm	1000=10µm	20=20"	S=Silicone
	GF	0080=0.8µm	1500=15µm	40=40"	E=EPDM
HF150NB (PET Net)		0100=1.0µm	2000=20µm	60=60"	V=Viton
HFM150		0200=2.0µm	4000=40µm	80=80"	
DSHF150		0300=3.0µm	7000=70µm		
G1HF150		0500=5.0µm	9000=90µm		
N1HF150					
N2HF150					
N3HF150					
N4HF150					
N5HF150					
JL-150					

# H-HF150 Series High Flow Rate Industrial Filter Housing

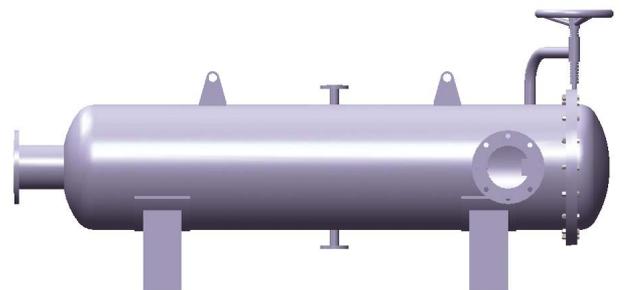
## Large High Flow Rate Filter Housing

Cobetter H-HF150 Series Industrial Filter Housing designed for use with HF150 Series Filter Cartridges mainly used for large fluid (liquid/water) flow rate applications, especially in water treatment. Especially designed for large flow rates, this filter housing requires a small area for installation and is cost efficient and easy to operate when compared to traditional filter housings.

It is available in 304 or 316L stainless steel, which ensures strong corrosion resistance for a wide range of applications.



In addition, it is available in a horizontal or vertical configuration. A vertical configuration is normally composed of 10-round 40" filters. For large flow rates of over 1000m<sup>3</sup>/h, we recommend a horizontal configuration with 60" HF150 filter cartridges as it satisfies large flow rate applications and is relatively easy to change.



### Surface Finish

Polish Type	Mirror Finish; Internal Mirror Finish Outer sand Blast
Surface Option	Internal Ra: 0.6µm; External Ra: 0.8µm

### Operating Conditions

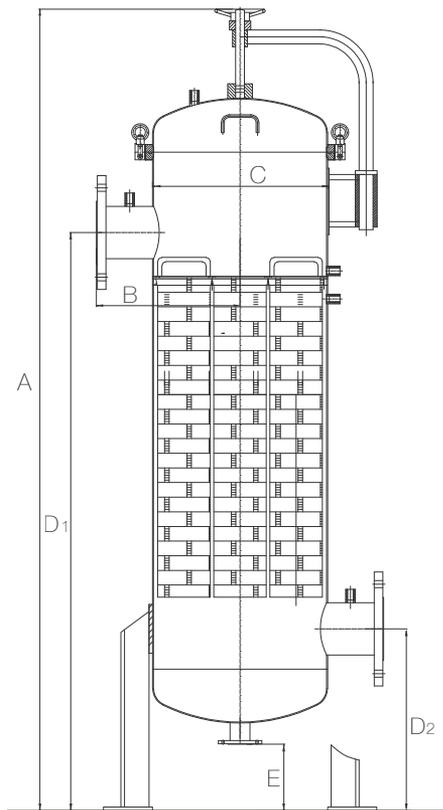
Max. Operating Pressure	0.6Mpa(6bar) / 1.0Mpa(10bar)
Max. Operating Temperature	135°C (266°F)

### Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Screw Bolt	304
Leg	304
O-ring / Gaskets	Silicon, Viton, EPDM

### Connection

Body Connection	Swing Bolt / C-Clamp
Inlet / Outlet	Flange
Vent	G1/2"
Drain	G1"
Pressure Gauge	M14*1.5



### Drawings & Dimensions

	1round		3round		4round	
	40"	60"	40"	60"	40"	60"
A	1555	2055	2170	2670	2200	2700
B	250	250	380	380	400	400
C	219	219	400	400	450	450
D <sub>1</sub>	1355	1855	1655	2155	2175	2675
D <sub>2</sub>	335	335	405	405	420	420
E	150	150	150	150	200	200

	5round		6round		7round	
	40"	60"	40"	60"	40"	60"
A	2580	3080	2600	3100	2600	3100
B	410	410	455	455	455	455
C	550	550	550	550	550	550
D <sub>1</sub>	1840	2340	1860	2360	1860	2360
D <sub>2</sub>	550	550	570	570	570	570
E	200	200	200	200	200	200

### Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Configuration
H-HF150	<u>3</u>	<u>10</u>	<u>F</u>	<u>H</u>	<u>D</u>	<u>F80</u>	<u>S</u>	<u>X</u>	<u>A</u>	<u>V</u>
	<b>01</b> 1 round	<b>20</b> 20 inch	<b>F</b> 304	<b>H</b> HF150	<b>D</b> Screw Bolt	<b>F80</b> Flange DN80 (1round)	<b>S</b> Silicone	<b>X</b> 0.6MPa	<b>A</b> Mirror Polish	<b>V</b> Vertical
	<b>02</b> 2 round	<b>30</b> 30 inch	<b>S</b> 316L		<b>C</b> C-Clamp	<b>F125</b> Flange DN125 (2-3round)	<b>E</b> EPDM	<b>Y</b> 1.0MPa	<b>C</b> Internal Mirror Finish Outer Sand Blast	<b>H</b> Horizontal
	<b>03</b> 3 round	<b>40</b> 40 inch				<b>F150</b> Flange DN150 (4round)	<b>V</b> Viton			
	<b>04</b> 4 round	<b>60</b> 60 inch				<b>F200</b> Flange DN200 (5-6round)				
	<b>05</b> 5 round	<b>80</b> 80 inch				<b>F250</b> Flange DN250 (7round)				
	<b>06</b> 6 round					<b>F250</b> Flange DN250 (8round)				
	<b>07</b> 7 round					<b>F250</b> Flange DN250 (9round)				

# H-FRP Housing

High Anti-Corrosive Performance

Economical Design

Cobetter H-FRP Filter Housing designed for use with Cobetter HF-150 High Flow Filter. Since it is a separate unit, it can easily be connected and used in conjunction with a reverse osmosis system. Due to its high anti-corrosive ability and high-strength glass fiber reinforced plastic (FRP), this housing is suitable for use in seawater desalination.

## Features and Benefits

- Modular Design - provides easy connection and disassembly
- Attractive Appearance
- Valve on Branch Tube Allows for Filter Change-out – system remains running
- Available in Horizontal or Vertical Design

## Filter Cartridge Specifications

Number of Filter	1
Filter Length	1028mm/1540mm
Filter Diameter	152mm
Flow Direction	From Inside to Outside
Design Flow Rate	35m³/h

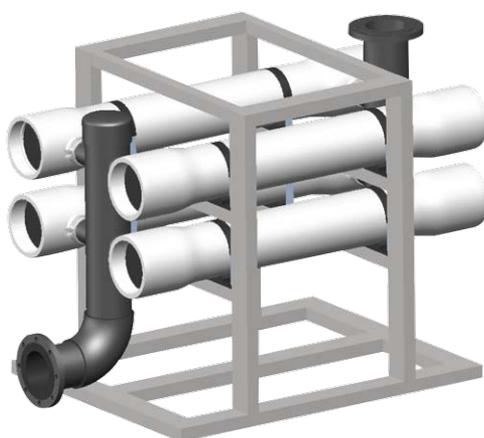
## Operating Conditions

Operating Pressure	0.6Mpa / 1.0Mpa
Operating Temperature	-10 ~ 65°C

## Material of Construction

Housing Material	FRP
Inlet	FRP
Saddle	Rubber
Support Strap	Stainless Steel & Rubber & Brass
Strap Bolt	Stainless Steel
Seal Material	EPDM / Silicon/Viton

**Remark:** The system will be custom designed and manufactured per customer site conditions if flow rate exceeds 300m³/h.



## Ordering Information

	Number of Filters	Filter Length	Material	Filter Type	Inlet / Outlet	Sealing Material	Design Pressure
H-FRP150	<u>1</u>	<u>60</u>	<u>F</u>	<u>H</u>	<u>C80</u>	<u>S</u>	<u>X</u>
	<b>01</b> 1 round	<b>20</b> 20 inch <b>40</b> 40 inch <b>60</b> 60 inch <b>80</b> 80 inch	<b>F</b> FRP	<b>H</b> HF150	<b>C65</b> Coupling DN65 <b>C80</b> Coupling DN80 <b>C100</b> Coupling DN100	<b>S</b> Silicone <b>E</b> EPDM <b>V</b> Viton	<b>X</b> 0.6MPa <b>Y</b> 1.0MPa <b>Z</b> Customize

# Hall Pyke



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