

大流量折叠滤芯 / HIGH FLOW PLEATED FILTER CARTRIDGE

BOC系列大流量滤芯采用复合滤材组合，能有效去除水中的固体杂质和颗粒。其独特的褶形在保证流道稳定的同时也提供了更大的过滤面积。滤材的支撑层采用塑料网格，大幅度降低了流阻，增强了滤材的强度，增加了滤芯的过滤效果及使用寿命。滤芯全部采用PP材质热熔焊接而成，结构稳定，可以广泛应用于不同的领域

BOC high flow cartridges consist of a composite material, which can effectively remove the impurities and particles. The unique pleat-shaped design has a greater filtration surface ensuring stability of the flow-path. A plastic mesh is used in the supporting layer, which greatly reduces flow resistance, strengthens the filter material, increases cartridge filtering effect and service life. The cartridge is made of hot-melt welding polypropylene, a stable material used in a variety of critical applications.

大流量折叠滤芯性能特点 / BOC Cartridge Characteristics

- 外径6" (152mm)，单侧开口，专用手环设计，安装更方便，密封性更好
 - 接口型式齐全，可以提供专门用于凝结水精处理除铁过滤的高温、高压型产品
 - 内置中心杆，外附支撑骨架，全聚丙烯（PP）结构，不会产生纤维脱落等隐患
 - 热熔焊接，无化学粘合剂，对水体无污染，耐腐蚀性强
 - 特殊的打褶工艺，增大滤芯过滤面积，延长使用寿命
 - 优化流体的水利条件设计，超强骨架结构，褶型结构稳定，流道均匀，通量大，超强内外支撑保护，抗变形能力强，更换压差是普通滤芯的两倍
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- Diameter 6" (152mm), opening single-side, special design of handle ring for easy assembly, better sealing.
 - Wide range of connections, suitable for high temperature and high pressure applications, including condensate filtration.
 - Core and the outer structure support are made of polypropylene, which helps maintain structural integrity, even in the most challenging applications.
 - Welded polypropylene eliminates the use of adhesives, thereby preventing contamination.
 - Pleated design increases filtration surface and life of the cartridge.
 - Industry leading design with carefully selected, sturdy material offers highest hydraulic capacity and DP limits.

BOC 系列大流量折叠滤芯技术优势 / Comparative Advantages

- BOC使用的滤材是“长效热熔工艺”，属于长纤维深层过滤，过滤效率高，适应范围广，纳污能力强，压差增长缓慢，过滤性能好；而大多数品牌滤芯的滤材是熔喷工艺，滤丝粗细不均匀，属于平面浅层过滤，纳污能力不高
- 滤材的相容性（COC）更高，滤材溶出物少，符合FDA 177.1520标准
- BOC cartridge adopts “hot-melt process”，a kind of long fiber, which has high performance in filtration effect and efficiency, in feed impurity tolerance, DP level before replacement and range of applications. While most of the cartridges in the market are melt-blown technology with fibers of uneven thickness, flat surface filtration and low impurity tolerance.
- Higher compatibility of construct(COC) and less dissolved of the filter material in accordance with the standard FDA 177.1520.



BOC选型指南 / BOC Technical Data: BOC CFE BOW 60-40-05

滤芯系列 Cartridge serie	接口形式 Connection	直径 Diameter	滤芯长度 Cartridge length	过滤精度 (μm) Micron ratings (μm)
CFE	BOW型 / BOW type PAL型 / PAL type MV型 / MV type MH型 / MH type PKD型 / PKD type PKS型 / PKS type LV型 / LV type W型 / W type	60-6" (152mm)	20" (508mm)	1、3、5、10、20、40、70
			40" (1016mm)	
			60" (1524mm)	

滤芯性能 / Cartridge performance	
更换压差 / Max. differential pressure	29psi (0.2MPa)
最高操作温度 / Max. Working temperature	176°F (80°C)
滤芯面积 / Filtration surface	
20"	38ft ² (3.5m ²)
40"	76ft ² (7m ²)
60"	114ft ² (10.5m ²)
最大过滤流量 / Max. flow	
20"	110gpm (25m ³ /h)
40"	220gpm (50m ³ /h)
60"	308gpm (70m ³ /h)
滤芯材质 / Cartridge material	
过滤层 / Filter layer	聚丙烯 (PP)
内外支撑 / Inner/outer support	聚丙烯 (PP)
端盖 / End cap	聚丙烯 (PP) /聚丙烯+玻纤 (FRP)
O型圈材质 / O-ring material	EPDM、丁晴橡胶、氟橡胶、硅胶 EPDM, NBR, FPM, SIL

BOC滤芯过滤效率 / Filtration efficiency of BOC cartridge

Particle Size Micron Rating	β Ratio		
	β 1000	β 100	β 10
1μm	1μm	0.6μm	0.2μm
3μm	3μm	2μm	1.5μm
5μm	5μm	3μm	3μm
10μm	10μm	9μm	7μm
20μm	22μm	19μm	15μm
40μm	39μm	17μm	16μm
70μm	70μm	45μm	20μm

$$\beta \text{ Ratio} = \frac{\text{上游粒子数量} / \text{Number of upstream particles}}{\text{下游粒子数量} / \text{Number of downstream particles}}$$

注释 / Note:

- β 1000: 去除率 / particle removal rate 99.9%
- β 100: 去除率 / particle removal rate 99%
- β 10: 去除率 / particle removal rate 90%

