Argonide Corporation

NanoCeram® FILTERING SOLUTIONS

NanoCeram-PB™ Series
Electropositive Filter Media + Carbon Block Filter Cartridges

The NanoCeram-PB™ Series pleated filter cartridges with a carbon block center core combine high efficiency particulate filtration with long-lasting chlorine adsorption. NanoCeram-PB™ is a further advancement in Argonide's series of filters and is a major breakthrough in activated carbon filtration. The addition of a carbon block center core to a NanoCeram electropositive filter provides greater chlorine adsorption than a typical carbon block cartridge.

NanoCeram's unique particle adsorption technology provides superior protection to the carbon block and while delivering long-lasting particulate filtration and freedom from premature fouling that typically impacts carbon blocks. NanoCeram-PB cartridges offer a unique combination of efficiency & capacity for both particulate and chemical adsorption including soluble contaminants such as soluble trace organics and chlorine. Their best use is in those applications where a combination of fouling-resistant soluble contaminant removal and particulate reduction is desired.

Retention Characteristics

- Chlorine Reduction: 2 ppm to less than 1 ppm for > 24,000 gallons (PB4.5-20)
- Silt Density Index (SDI): $\leq 1.0 \pm 0.1$
- >99.9% Efficiency at 0.2 microns (latex spheres)
- >4 LRV Cyst Retention
- >6 LRV Bacteria (E. coli) retention
- <0.01 NTU until Terminal ΔP: 35 psid (2.4 bar)
- Dirt Holding Capacity: 82.3 g/ft^2

Markets

- Food, Beverage & Bottled Water
- Pharmaceutical & Biomedical
- Cosmetics & Personal Care
- MicroElectronics
- Power Generation
- Machining (including EDM)
- Potable Water (POE, POU, Municipal, Personal)
- Automobile Manufacturing
- Paints & Coatings

Features

- Pleated construction yields high flow rates
- Available in standard DOE configurations
- Low Initial ΔP: <5 psi@7 gpm (Part PB4.5-20)
- Manufactured with strict quality control
- All components are manufactured with materials that meet FDA requirements 21CFR177.1520 for direct food contact applications.

Applications

- Waste Water (VOC's, disinfectant by-products (DBP's), trace toxic organics, endocrine disruptors, soluble & particulate dyes)
- POE & POU—Residual chlorine, toxic organic pollutants
- Polishing Filters (carbon fines, coagulation processes, water purification systems)
- RO Prefiltration (Chlorine and SDI reduction)
- Process Water (turbidity, particulate, colloidal suspensions)
- Cooling Towers, Chill Water Loops (iron removal)
- Chemical-Biological Filters—protection against terrorist contamination of water supplies

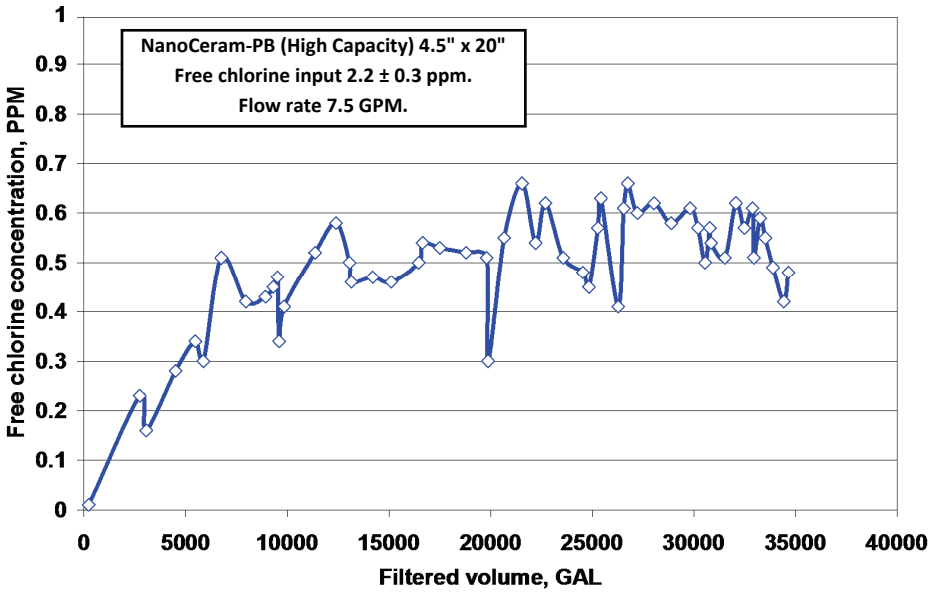
NanoCeram-PB™ Series

Specifications

Part No		PB2.5-10	PB4.5-10	PB4.5-20
Surface Area	ft^2 (m^2)	2.9 0.27	5.4 0.503	11.2 1.04
Dirt Holding Capacity	grams	238.5	445.9	925.0
Electroadsorptive Surface Area	ft^2 (m^2)	128,500 11,900	240,000 22,200	496,000 46,100
Dimensions	in (cm)	2.75 x 9.75 7.0 x 24.8	4.45 x 9.75 11.3 x 24.8	4.45 x 20 11.3 x 50.8
Suggested Flow Rate	gpm (lpm)	1 4	3.5 13	7 27
Peak Flow Rate*	gpm (lpm)	4 15	12 45	24 90

***Peak Flow Rate based on initial flow using new filter cartridge and clean water during laboratory testing.**

NanoCeram-PB™ Chlorine Adsorption:



Materials of Construction

Media : NanoCeram® Media
Activated Carbon Block
Support: Polypropylene, Hot Melt
Gasket: Neoprene

Operating Conditions

Temperature: 39-180°F (4-82°C)
pH Range: 5 to 10
Terminal Pressure Drop: 35 psi (2.4 bar)

Ordering Information
Part No:

PB2.5-10
PB4.5-10
PB4.5-20

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