

# Triple Clear Force Field™ Filters

## Patented Technology Creates the Ultimate Filter for Water Purification & Filtration

Using electroadsorptive technology, our filters remove a wide range of submicron particulates, pathogens, trace pharmaceuticals, cellular debris, and heavy metals.

We do this using a combination of 400 layers of mechanical filtration and a naturally occurring positive charge field that essentially puts a “force field” over the pores that will attract and capture negatively charged contaminants in water (and most contaminants are negatively charged). It is like a magnet that attracts, captures, and kills the pollutants in water. Unlike other submicron filters, Force Field™ Filters have very little pressure drop making them the perfect choice for most plumbing applications.

### How powerful is it?

Force Field™ Filters provide water quality on par only with Reverse Osmosis at a fraction of the cost and with none of the drawbacks. Independent laboratory tests have proven its ability to provide 4 and 6 log reduction of bacteria, virus, and cysts! It can also remove better than 99% of heavy metals like lead and chromium VI. Force Field™ Filters are the ultimate choice for providing safe water to your customers.

### How does it compare to other water remediation technologies:



Water Remediation Technologies - Residential, Commercial, Industrial, Municipal, Desal								
Contaminants	Force Field™ Pac Technology	RO	NF	UF	MF	Particulate Cartridges	Carbon Block	Ultra violet
Dissolved Salts		■						
Endotoxin	■	■	■	■	■	■		
Virus	■	■	■					■
Bacteria	■	■	■	■	■	■	■	■
Cysts	■	■	■	■	■	■	■	■
Polysaccharides (TEP)	■	■	■	■	■			
Colloids	■	■	■	■				
Particulates	■	■	■	■	■	■	■	
Chemical Reduction	■	■					■	■
Trace Pharmaceuticals	■	■					■	■

Membrane definition: Reverse Osmosis=RO; Nanofiltration=NF; Ultrafiltration=UF; Microfiltration=MF.

## CERTIFIED PERFORMANCE BY THIRD PARTY TESTING

### Microbiological Threats

Testing by BCS Labs (1/2/14), #1401002

Challenge Species: Triple Clear 2.5" Force Field™ Gravity Camp Filters	Filter Influent Average Concentration	Percent removal of the challenge species by the filter initially and following the passage of the indicated volume (liters) of laboratory grade reagent water			
		1.0 liter	10.0 liter	25.0 liter	50.0 liter
Bacteria: Raoultella terrigena	3.45 x 10 <sup>5</sup> cfu/ml	>99.9999%*	>99.9999%*	>99.9999%*	>99.9999%*
Virus: MS-2 Bacteriophage	3.45 x 10 <sup>5</sup> pfu/ml	>99.9999%*	>99.9999%*	>99.9999%*	>99.9999%*
e: 3.0 micron microspheres	1.8 x 10 <sup>4</sup> spheres/ml	>99.998%*	>99.998%*	>99.998%*	>99.998%*

\* No species were detected in the filter effluent for the duplicate samples analyzed. Filter effluent samples were analyzed in duplicates at the minimum following collection.

### Heavy Metals

Metal Species	Influent Concentration (ppm)	Filter #1 Effluent following passage of 100 gallons water; BCS 1407065		Filter #2 Effluent following passage of 100 gallons water; BCS 1407066		Cumulative % Reduction
		Concentration (ppm)	% Reduction	Concentration (ppm)	% Reduction	
Arsenic (As)	.011	0.0052	95.3%	<0.0040**	>96.4%**	95.9%
Barium (Ba)	.011	0.01	90.9%	0.0054	95.1%	93.0%
Cadmium (Cd)	.010	<0.0010**	>99.0%**	<0.0010**	>99.0%**	>99.0%**
Chromium (Cr)	.015	<0.0020**	>98.7%**	<0.0020**	>98.7%**	>98.7%**
Lead (Pb)	0.084	<0.0022**	97.4%**	0.0027	96.8%	97.1%
Mercury (Hg)	0.140	0.069	50.7%	0.056	40.0%	45.4%
Selenium (Se)	.011	<0.0050**	>95.5%**	<0.0050***	>95.5%**	>95.5%**
Silver (Ag)	0.064	0.0049	92.3%	<0.0010**	>98.4%**	95.4%

\*\* The species was not detected in the effluent.

### Other Contaminants

- PCB's Remove to 99+%
- Antibiotics Remove to 99+%
- Bisphenol A (BPA) remove to 99+%
- TEP remove to 99+%
- Chlorophyll remove to 99+%
- Trace Hydrocarbons remove to 99+%

### Specifications

- Max Operating Temp: 160F
- Max Flow Rates: 2gpm to 45gpm (per filter)
- Nominal Dimensions: 5", 10", 20", 30", 40" Length, 2"-7" diameter
- Micron: Effective micron rate .001
- Endcaps: 222, 226, DOE