

Product Catalogue

2024

www.nescofiltration.com





We provide products conforming to governing standard and of consistent quality which help us stand out in all our operations to achieve customer satisfaction for sales and services. Our team firmly believes in sharing information of the products and other extremely important details, necessary for the community and for our respected dealers.

Quality Manufacturers of Water Filtration Equipments in United Arab Emirates

Commitment to Total Quality

We are committed to provide superior quality products and services to our customers and never compromise on quality in everything that we do.

Respect for Individuals

We value each individual in the company, suppliers and service providers for their contribution and respect our relationship with them.

Customer Comes First

Our product and services are developed with the customer in mind. We treat our customers with dignity and honesty and focus on the success of our customers.

Collaboration and Teamwork

We value shared decision-making, teamwork and partnerships and seek opportunities to build relationships that will create greater value across functions, businesses and locations.

Continuous Learning and Innovation

We believe that improvement is a continuous process. We are always open to change in order to discover new and creative ways to meet the changing needs of our customers.



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Domestic Filters & Purifiers

National Green produces a variety of domestic filters and purifiers to suit individual needs



Page 22

Domestic Reverse Osmosis Units

Standard domestic and commercial reverse osmosis units from 75 to 450 GPD capacity



Page 26

Domestic Ultraviolet Sterilizers

Ultraviolet Sterilizer are available from smallest 1 GPM to 12 GPM capacity



Page 30

Replacement Cartridges

A wide range of cartridges manufactured by NationalGreen including String Wound, Spun and GAC cartridges





National Green water purification system is a self-governing division of NESCO, located in Hamriyah free Zone Sharjah UAE, established over 25,000 sq. meters of manufacturing facility.

Since inception of new division, we widely adopted the world's most advanced electro-mechanical technology inclusive of robotics, plastic injection molding, ultrasonic welding and many other advanced facilities. We constantly improve the product manufacturing quality to strive for excellence and to accomplish the need of our valued customers.

We provide products conforming to governing standard and of consistent quality which help us stand out in all our operations to achieve customer satisfaction for sales and services. National team firmly believes in sharing information of the products and other extremely important details, necessary for the community and for our respected dealers.

As with all leading-edge technologies, there will always be improvements to be made; our mission is to bring sustainable productivity through safer, cleaner, more efficient, and cost effective manufacturing of water purification products.



Our dedicated team is ready to assist



Continuous improvement is our objective
Specifications are subject to change without notification
Cat-23-NESCO-Rev-4-2301

Domestic Filters & Purifiers



NATIONAL GREEN[®]
WATER PURIFICATION SYSTEMS

Made in United Arab Emirates

A photograph of a dining table set for a meal. In the center is a large, hollowed-out pumpkin filled with a yellow substance, surrounded by autumn leaves. The table is covered with a patterned placemat and has several white plates, glasses of water with ice, and glasses of white wine. A bowl of bread rolls is prominent in the foreground. In the background, a young boy is seated at the table, and a white oven is visible in the kitchen area.

National Green Manufactures a variety of different filters and purifiers to match individual needs.

These range from a simple single filter to multi-stage filtration units

Single Wall Mount Filters

Single line filters are basic filters with endless applications. The housing material options are Polypropylene and Styrene Acrylonitrile (SAN). Filter heads are tightened on top seated Buna-N O-Rings. The filters are available with a variety of options like color, air release button, brass ports, port options $\frac{3}{4}$ ", $\frac{1}{2}$ " $\frac{3}{8}$ ", and $\frac{1}{4}$ " and cartridge types according to custom requirements.

The corrosion free plastic bracket is specially designed for future extensions. A variety of cartridge combinations are available

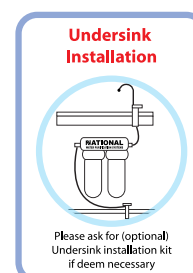


Applications:

- OEM Equipment for water filtration
- Food processing
- Pre-filter for RO units
- Pre-filter for Water dispensers and coolers
- Point of use water purification
- Photographic applications
- Flow sight indicators
- Recreational vehicles
- Laboratories and many more

	White	Blue	Clear
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Sump: Styrene-acrylonitrile Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	Pressure: 110 psi (Max) Burst: 275 psi Temperature: 50°F (Max)

Recommended Replacement Cartridges



Countertop Filters

This is a unique multipurpose filtration system at affordable price. Latest design technology combines pre and post filtration in one cartridge, effective result can be achieved in seconds.



Countertop units are quickly fixable with kitchen tap, owing to its unique dual purpose and space saving design. A wide range of cartridges can be used for different water quality and results.

Factory pre-installed fittings save installation time. The regular housing has greater strength and durability, available in clear, white, blue and green colors.

Adjustable Stainless Steel metallic faucet ensures easy operation and longer life. A special diverter valve at water inlet. Space saving and effortless re-positioning on kitchen counter.



	Regular	Slimline Single	Slimline Dual
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Reinforced Polypropylene Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button	Styrene-acrylonitrile Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: Dual Purpose Cartridge NFC-DPC-101-G	Reinforced Polypropylene Stainless Steel 304 Dual Purpose Cartridge NFC-DPC-101-G	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-SS Granular Activated Cartridge NFC-GAC-101-G
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	120 psi (Max) 300 psi 50°C (Max)	110 psi (Max) 275 psi 50°F (Max)

Recommended Replacement Cartridges



Very easy to install
No need to drill holes
Simple twist-on installation
Fits most standard faucets

Dual Wall Mount Filters

Dual filters are basic filters with additional stage, which gives flexibility to add another cartridge for better water quality. The most common is carbon cartridge.



Applications:

- OEM Equipment for water filtration
- Food processing
- Pre-filter for Water dispensers and coolers
- Point of use water purification
- Photographic applications
- Flow sight indicators
- Recreational vehicles
- Laboratories and many more



	White	Blue	Clear
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Reinforced Polypropylene Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button	Styrene-acrylonitrile Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	120 psi (Max) 300 psi 50°C (Max)	110 psi (Max) 275 psi 50°F (Max)

Recommended Replacement Cartridges



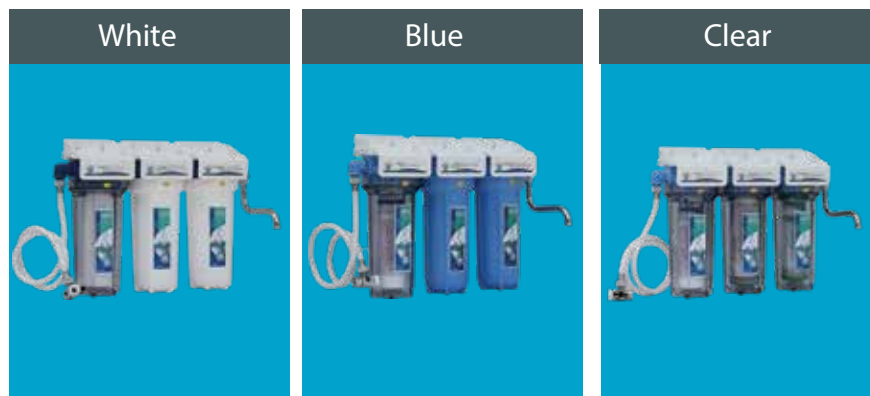
Triple Wall Mount Filters

Triple water filter is the best in-line filter with sediment and carbon cartridges, which gives the best quality water.



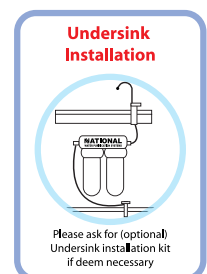
Applications:

- OEM Equipment for water filtration
- Food processing
- Pre-filter for Water dispensers and coolers
- Point of use water purification
- Photographic applications
- Laboratories and many more



	White	Blue	Clear
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Reinforced Polypropylene Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button	Styrene-acrylonitrile Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G Carbon Block Cartridge NFC-CBC-105-R	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G Carbon Block Cartridge NFC-CBC-105-R	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G Carbon Block Cartridge NFC-CBC-105-R
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	120 psi (Max) 300 psi 50°C (Max)	110 psi (Max) 275 psi 50°F (Max)

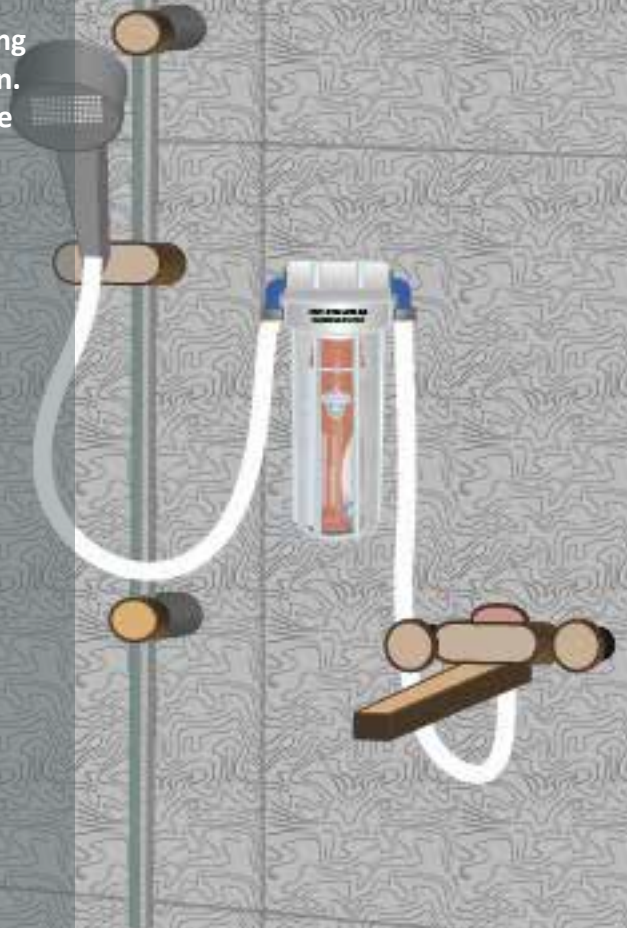
Recommended Replacement Cartridges



Shower Filter

Shower filter is one of most convenient and effective way of reducing harmful exposure to chlorine and other chemicals.

The benefits include greater respiratory health by reducing the risk of asthma and bronchitis from chlorine inhalation. This is specially the case in children, who are at risk of the harmful effects of chlorine inhalation.



Durable and elegant design
Easy to install
3-Stage filtration
High capacity
Rechargeable

As chlorine is a leading cause of fatigue, showering in filtered, chlorine-free water results in higher energy levels and overall greater skin health.

Chlorine is known for its drying effect, removal of chlorine will lead to a softer, healthier, and younger looking skin. This will also reduce the rashes and the appearance of wrinkles.

When the body is able to retain its natural moisturizers, the need for costly lotions and moisturizers is greatly reduced.

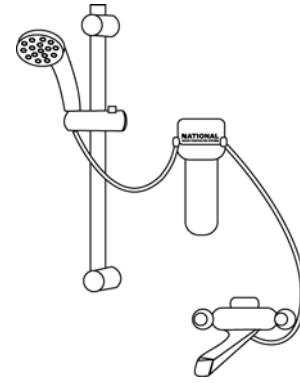
Excess of Chlorine is shown to be one of the cause of breast, bladder, rectal and colon cancer. Reduction of chlorine becomes specially important in reducing the drastic effect in people with family history.

Removes 95% of chlorine
Removes 98% of heavy metal
KDF Stops the growth of bacteria
Multi-layered filter
Easy -installation
Replaceable filter cartridge

Operating Conditions

Operating Pressure: 15 psi (Min)
125 psi (Max)
Temperature: 50°F (Max)

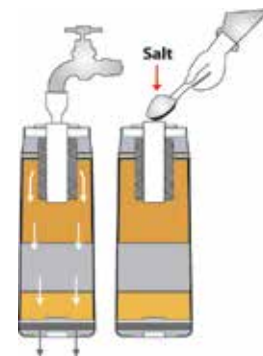
Recommended
Replacement Cartridges



Instructions for Cartridge Recharge

Cartridge should be recharged once in a month or after 200 gallons

1. Fill the cavity with common table salt
2. Pass the water very slowly till all the salt is drained, usually it takes around 10-15 minutes



Activated Carbon + KDF® + Cationic Resin (FDA Grade)
Activated Carbon, Cationic and KDF resins removes chlorine, calcium, magnesium, iron as well as other unwanted chemicals from water by adsorption and ion-exchange process. The processed water is ideal for shower, makes hair free of scale, healthier, silkier and prevents hair losses.

Laundry Filter

Laundry Filter essentially keeps the inlet valve screen free from sediment buildup. As this screen gets contaminated, the water flow slows down, adding extended time to the wash cycle and distorting the water temperature.

In extreme cases, the sediment gets trapped between the solenoid valve, allowing the water to continue to flow, creating flooding. This in line filter will remove sediments, rust, dust, sand, silt, and other suspended particles from the water before entering into the washing machine, water cooler and desert cooler.



Washing Machine:

- Better cleaning
- Less use of detergent
- Rust free rinsing brighten the white and optimizes cloth's color
- Less breakdown and maintenance
- Save cycle time

Desert Cooler:

- Water level automatic top up type
- Less sediment deposit in water tank
- Prevents Bad odor
- Reduces maintenance
- Less corrosion in the tank
- Lengthens the life of wood wool

Water Cooler:

- Less silt deposit in the Tank
- Sediment free water
- Less bacterial growth and odor
- Less maintenance

Operating Conditions

Operating Pressure: 15 psi (Min)
125 psi (Max)
Temperature: 50°F (Max)

National PP Yarn sediment filter cartridge removes dust, rust, silt, scale and invisible suspended particles thoroughly.

Code: NFCJJ1 01

Wound Polypropylene 10" 1-micron
Replacement Every 3-4 months
In case of heavy use or due to local water condition needs a more frequent change.

Recommended Replacement Cartridges






Main Line Filters

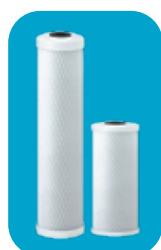
Main-line filters are a simple and reliable way to protect household appliances and plumbing equipment from plugging and corrosion which destroys metallic pipelines and fittings, and rust deposition.



Main line filters are designed for quick installation and easy maintenance, suitable for home entry point water lines

	Single	Dual	Triple
			
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Sump: Styrene-acrylonitrile Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-205-J	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-205-J Granular Activated Cartridge NFC-GAC-101-G	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-205-J Granular Activated Cartridge NFC-GAC-101-G Carbon Block Cartridge NFC-CBC-105-R
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	Pressure: 110 psi (Max) Burst: 275 psi Temperature: 50°F (Max)

Recommended Replacement Cartridges



Domestic Reverse Osmosis

Reverse Osmosis technology is considered by far the most economical and reliable method for water purification. The prefilters are meant for the removal of all sediments and organic chemicals. The heart of the system is reverse osmosis membrane which removes 90-99% of different ions, thus making it the best point-of-use filtration unit.

Removal of excess ions particularly sodium makes the water ideal for people with hypertension and other heart diseases. Keeping the dissolved contents in water within safe range helps proper hydration and minimum load of excessive salts on kidneys.

Contaminant	% Rejection*	Contaminant	% Rejection*
Aluminium	98%	Ammonium	97%
Arsenic	97%	Barium	96%
Bicarbonate	99%	Bromide	99%
Cadmium	97%	Calcium	97%
Chloride	99%	Chromium	96%
Copper	97%	Cyanide	97%
Fluoride	98%	Iron	99%
Lead	97%	Sodium	99%
Magnesium	99%	Mercury	96%
Nickel	97%	Nitrate	95%
Potassium	99%	Selenium	95%
Silica	95%	Silver	95%
Sulphate	99%	Zinc	97%

*Maximum levels of rejections under standardized conditions

Reverse Osmosis Units

National Green reverse osmosis units are designed for domestic applications keeping in mind the ease of installation and maintenance.

- All quick fittings for easy installation
- Standardized components
- Complete with all fittings and accessories
- Storage tank is included with convenient 4 gallons capacity
- High efficiency and low waste system
- Fresh, crisp taste superior to bottled water
- 75 Gallons/day output



The standard 5-Stage systems efficiently solves purified water needs by providing a powerful step-wise filtration system which is affordable, easy to maintain and gives years of trouble free operations with minimal maintenance.

The system has been designed keeping in view majority of kitchen cabinet spaces. Specifically for under-sink installation for minimum space usage.

Stage-1: Pre-Filtration Unit

Water is filtered for sediments and dirt particles

- Filtration rating: 5-micron
- Cartridge type: In-depth filter
- Replacement cartridges: WPP105 / SPP105G
- Replacement frequency: Within 3 months or earlier as needed

Stage-2 -3 : Water Purification Units

All organic pollutants including chlorine are removed from the water in this process

- Cartridges type: Taste and odor removal
- Replacement cartridges: GAC101D (2nd stage) and CBC101R (3rd stage)
- Replacement frequency: Withing 4-6 months or earlier as needed

Stage-4: Desalination Unit Reverse Osmosis Membrane

Filtered and purified water is desalinated in this stage. Thin film composite Reverse Osmosis Membrane is installed in the unit for best product water quality and efficient Cross-Flow filtration. The membrane cleans itself automatically to ensure a long lasting life.

- Model: TFM-75 (Made in USA)
- Membrane type: Thin film composite (TFC)
- Capacity: 75 Gallons per day (GPD)
- Replacement Frequency: Within 2 years or as often as needed.
Replace when persistant high TDS value exists.

Stage-5: Water Polishing and Purification Unit

Treated water is further polished and purified in the 5th stage just before it is drawn for consumption.

- Cartridges type: Taste and odor removal and polishing
- Replacement cartridges: ILGAC-10
- Replacement: Within 6 months or as often as needed

System Controllers:

- Flow Restrictor
- Auto Shut-off valve
- High pressure switch
- Low pressure switch
- Pressure booster pump
- Auto flush solenoid valve
- Solenoid shut-off valve

Power Supply:
Input: 220VAC / 50 Hz / 60 Hz

Feed Water Parameter:

- Turbidity: 1 NTU (max)
- Chlorine Levels: 0.5 PPM (max)
- Temperature Range: 100°F (37.5°C)
- Line Pressure Range: 10 to 40 psi (0.7 to 2.8 bar)
- Total Dissolved Solids: 1,500 ppm (max)

Manufacturer's Ratings:

- Pressure: 10-120 psi
- Temperature: 100°F / 37.5°C
- Flow Rate: 75 GPD

Optional
Ultraviolet sterilizer in 6th Stage



Mineralizer Cartridge



Recommended Replacement Cartridges



Ultraviolet Purifiers

Ultraviolet

Ultraviolet is a means of killing or rendering harmless microorganisms in a dedicated environment. These microorganisms can range from bacteria and viruses to algae and protozoa. UV disinfection is used in air and water purification, sewage treatment, protection of food and beverages, and many other disinfection and sterilization applications. A major advantage of UV treatment is that it is considered safer and more reliable for disinfection of water than chemical alternatives, while the level of disinfection is much higher. UV treatment systems are also extremely cost efficient and require less space than alternative disinfection systems

NATIONAL GREEN®
WATER PURIFICATION SYSTEMS

Made in United Arab Emirates

Environmentally friendly, no dangerous or toxic chemicals to handle, no problem of overdosing (it's impossible), no need for specialized storage equipment, no WHMIS requirements.

Low initial capital cost as well as reduced operating expenses when compared with similar technologies such as ozone, chlorine, etc.

Immediate treatment process, no need for holding tanks, long retention times, etc.

Extremely economical, hundreds of gallons may be treated for each penny of operating cost.

No chemicals are added to the water supply – no chlorinated by-products are generated (chlorine+organics=trihalomethanes).

No change in taste, odor, pH or conductivity or the general chemistry of the water; essential minerals and trace elements remain in the water

Automatic operation without special attention or measurement, operator friendly.

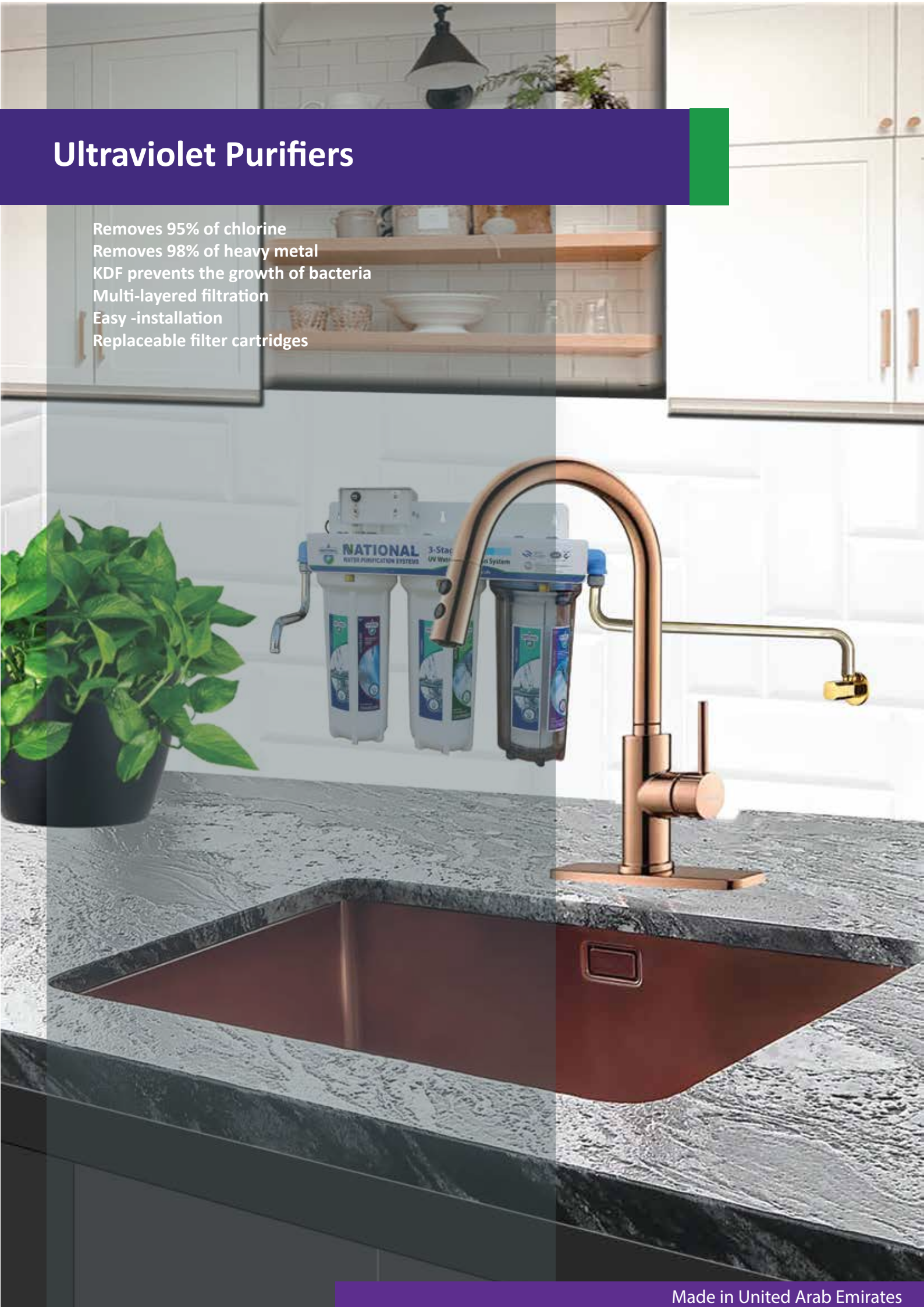
Simplicity and ease of maintenance, periodic cleaning (if applicable) and annual lamp replacement, no moving parts to wear out.

Easy installation, only water and a power connection.

Compatible with all other water processes (i.e. RO, filtration, ion exchange, etc.)

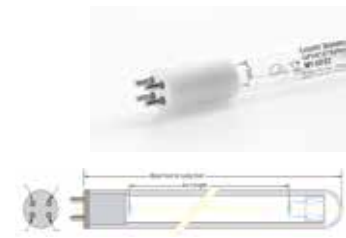
Ultraviolet Purifiers

- Removes 95% of chlorine
- Removes 98% of heavy metal
- KDF prevents the growth of bacteria
- Multi-layered filtration
- Easy -installation
- Replaceable filter cartridges



Low-pressure mercury lamps have the widest range of applications. Standard low-pressure mercury lamps offers the highest efficiency with 40% of the lamp's electrical power converted into UVC radiation at 253-255 nm, while high-output mercury lamps provide approximately twice the UVC output.

Our low pressure mercury lamps have an exceptionally long operating life of up to 10,000 hours.



Low Pressure Mercury Lamps



	White	Blue
Housings	Sump: Reinforced Polypropylene Head: Reinforced Polypropylene O Ring: Buna-N Air release: High Carbon Steel Spring SS Screw, PP Button	Reinforced Polypropylene Reinforced Polypropylene Buna-N High Carbon Steel Spring SS Screw, PP Button
Fittings & Cartridge	Bracket: Reinforced Polypropylene Screws: Stainless Steel 304 Cartridge: String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G	Reinforced Polypropylene Stainless Steel 304 String Wound NFC-WPP-105-R Granular Activated Cartridge NFC-GAC-101-G
Operations	Pressure: 120 psi (Max) Burst: 300 psi Temperature: 50°C (Max)	120 psi (Max) 300 psi 50°C (Max)

Specifications

- Feed Water Parameter:
- Turbidity: 1 NTU (max)
 - Chlorine Levels: 0.5 PPM (max)
 - Temperature Range: 100°F (37.5°C)
 - Line Pressure Range: 10 to 40 psi (0.7 to 2.8 bar)
- Voltage: 220Vac, 50Hz (Optional 110v)
- Operating temperature: -4°F - 122°F (-20°C-50°C)
 - Effective measurement: ≥38ml/cm²
 - Wavelength: 254nm
 - Sterilization rate: 99.9%
 - Lamp life: Approx. 10,000 hours
 - Transmittance (UVT): ≥80% Turbidity


Recommended Replacement Cartridges



Sediment Cartridges

NATIONAL GREEN®
WATER PURIFICATION SYSTEMS

Made in United Arab Emirates



Chemicals:	Polishing of chemical solutions, bulk industrial chemicals, solvents, acids, bases, monomers, process and cooling water
Magnetic Coatings:	Audio, video & computer tape, floppy discs, computer hard discs, solvents
Photographic:	Photo emulsions, chemicals, wash & rinse water
Food & Beverage:	Process water, edible oils, water, corn syrup & fructose syrup, beer, wine, spice oils, flavorings
Cosmetics:	Creams, oils & gels
Oil Production:	Well completion fluids, water flood
Health Care:	Chemical intermediates & solvents, parenterals solutions, membrane prefiltration, process, washing & cooling water
Air & Gas:	Compressed air, instrument air, most gases including nitrogen, hydrogen, helium, freon, most corrosive gases
Others:	Solution mining, deep well disposal, paint, ink & coatings, lubricating oils, electropolishing solutions, plating solutions, pigments & dyes, cleaning fluids, adhesives



String Wound Cartridges

National Green Wound PP Yarn Cartridges are manufactured on precision winding machines, the continuous length winding ensures a uniform construction and hence a superior filtration medium.

Graded pore structure, with high dirt holding capacity
Wide chemical compatibility
Food grade polypropylene fiber
Removal ratings 0.5,1, 5, 10, 20, 50 and 100 microns nominal
For use in all standard housings
Available in standard 9^{3/4}", 10", 20", 30", and 40" Lengths
Manufactured under ISO 9001:2008 quality system
Low foam technology



Materials of Construction:

Filter Media and Support Layers - Polypropylene
Support Core - Polypropylene

Recommended Operating Conditions:

Changeout ΔP 35 psid (2.4 bar)
Maximum Temperature 200°F (93°C)
Maximum ΔP @ 70°F (21°C) 60 psid (4.1 bar)
Maximum ΔP @ 200°F (93°C) 10 psid (0.7 bar)

Effective Filtration Area:

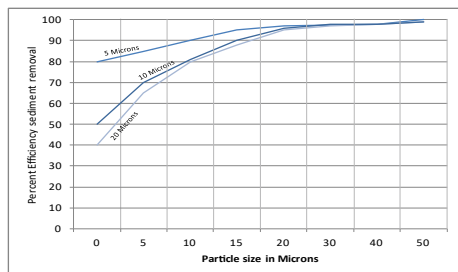
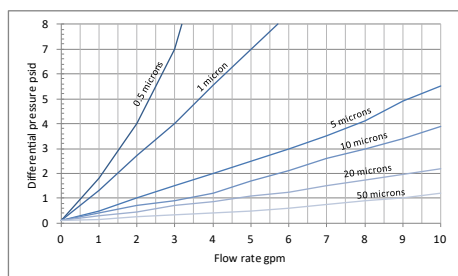
Up to 4.8 ft²/10" (0.48 m²/254 mm)

Filtration Ratings:

Nominal 0.5, 1, 5, 10, 20, 50 & 100 Microns

Recommended Maximum Flow Rate:

Maximum 8 gpm per 10" length



Conformities

The yarn being used conforms to following FDA standards of potable water

- 21CFR : 177.152
- 21CFR : 178.201
- 21CFR : 177.226
- 21CFR : 177.280
- 21CFR : 178.340

Flow rate vs Pressure drop calculation

$$\text{Flow rate (gpm)} = \frac{\text{Clean } \Delta P \times \text{Length Factor}}{\text{Viscosity} \times \text{Flow Factor}}$$

$$\text{Clean} = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

Clean ΔP is PSI differential at start.
Viscosity is centistokes.
Flow Factor is ΔP/GPM at 1cks for 10 inch (or single).
Length Factors convert flow or ΔP from 10 inch (single length) to required cartridge length.

Ordering Information

National Green Filter Cartridges				
NGC	WPP	10	5	R
	Material Type	Length	Micron Rating	Type
	PP=Polypropylene	10"	0.5	
		20"	1	E=Economy
		30"	5	R=Regular
		40"	10	G=Gold
		50"	20	JJ=Junior Jumbo
		60"	50	J=Jumbo
		70"	100	

Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality. Adequate disinfection is mandatory before consumption.

Melt Blown Spun Cartridges

National Green Melt Blown Spun Cartridges are manufactured with food grade Polypropylene, thermally bonded together on precision machines.

The fibers have been carefully spun together to form a true gradient density from outer to inner surface, enabling the entire depth of cartridge to be used.

Materials of Construction:

Filter Media and Support Layers - Polypropylene

Recommended Operating Conditions:

Changeout ΔP 35 psid (2.4 bar)
 Maximum Temperature 194°F (90°C)
 Maximum ΔP @ 70°F (21°C) 60 psid (4.1 bar)
 Maximum ΔP @ 200°F (93°C) 10 psid (0.7 bar)

Effective Filtration Area:

Up to 4.0 ft²/10" (0.38 m²/254 mm)

Filtration Ratings:

Nominal 1, 5, 10, 20, 50 & 100 Microns

Recommended Maximum Flow Rate:

Maximum 7 gpm per 10" length

Graded Pore Structure for Efficient Removal of Wide Range of Particle Sizes
 Wide Chemical Compatibility
 Food Grade Polypropylene Material
 Removal ratings 0.5, 1, 5, 10, 20, and 50 Microns Nominal
 For use in all standard housings
 Available in standard 10", 20", 30", and 40" Lengths
 High dirt holding capacity
 Manufactured under ISO 9001:2015 Quality System
 Custom End Caps available to fit a variety of housings

Chemicals:	Polishing of chemical solutions, bulk industrial chemicals, solvents, acids, bases, monomers, process and cooling water
Magnetic Coatings:	Audio, video & computer tape, floppy discs, computer hard discs, solvents
Photographic:	Photo emulsions, chemicals, wash & rinse water
Food & Beverage:	Process water, edible oils, water, corn syrup & fructose syrup, beer, wine, spice oils, flavorings
Cosmetics:	Creams, oils & gels
Oil Production:	Well completion fluids, water flood
Health Care:	Chemical intermediates & solvents, parenterals solutions, membrane prefiltration, process, washing & cooling water
Air & Gas:	Compressed air, instrument air, most gases including nitrogen, hydrogen, helium, freon, most corrosive gases
Others:	Solution mining, deep well disposal, paint, ink & coatings, lubricating oils, electropolishing solutions, plating solutions, pigments & dyes, cleaning fluids, adhesives

Conformities

Flow rate vs Pressure drop calculation

$$\text{Flow rate (gpm)} = \frac{\text{Clean } \Delta P \times \text{Length Factor}}{\text{Viscosity} \times \text{Flow Factor}}$$

$$\text{Clean} = \frac{\text{Flow Rate} \times \text{Viscosity} \times \text{Flow Factor}}{\text{Length Factor}}$$

Clean ΔP is PSI differential at start.
 Viscosity is centistokes.
 Flow Factor is ΔP/GPM at 1cks for 10 inch (or single).
 Length Factors convert flow or ΔP from 10 inch (single length) to required cartridge length.



Ordering Information

National Green Filter Cartridge				
NGC	MB	10	5	R
	Material Type	Length	Micron Rating	Type
	Melt Blown	10"	0.5	
		20"	1	E=Economy
		30"	5	R=Regular
		40"	10	G=Gold
			20	J=Jumbo
			50	
		100		

Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality. Adequate disinfection is mandatory before consumption.

Taste & Odor



NATIONAL GREEN®
WATER PURIFICATION SYSTEMS

Made in United Arab Emirates



National Green Granular Activated carbon cartridges provide new-age version of centuries old and most reliable method of removing bad taste and odour from potable water. These cartridges contain coconut shell based activated carbon which is acid washed for maximum performance and long life.

The Granular Activated Carbon is coconut shell based which is activated and acid washed for maximum efficacy. The standards are strict with minimum Iodine number of 1050 and a minimum Molasses number of 200. This quality assures performance in taste and odour removal and organics reduction.

High abrasion resistance gives our carbon the ability to withstand transporting without dust formation.

Cartridge life depends on feed water quality and can be extended by use of a sediment removal prefilter to prevent premature clogging of the media.

Activated Carbon Cartridges

Most reliable and effective bad taste & odor removal
Coconut shell based activated carbon
Better reduction of VOC's than most competitor products
Classic upflow cartridge design for maximum contact time
Prefilters for coarse particle removal extends the life of cartridges
Post filter of 5 or 1 micron prevents carbon fines from getting into water stream

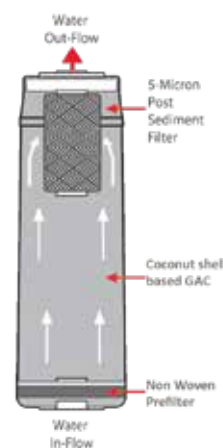
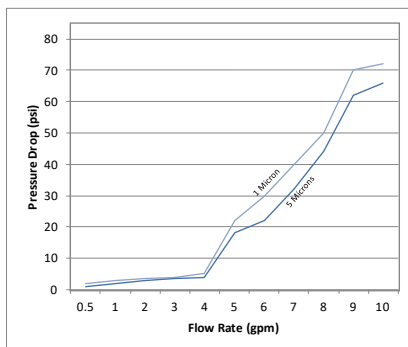


GAC cartridges effectively reduce bad taste and odor from raw water which is usually due to organic pollutants including chlorine.

Cartridges are specifically designed to allow water to enter the bottom of the cartridge, then filtered through the entire carbon bed before exiting at the top to maximize the contact time and therefore efficacy.

The prefilters allow coarse filtration for raw water, while a 1 or 5 micron post filter prevents minimum of carbon dust to go out of the cartridge

	Regular	Gold	Jumbo
			
Specifications	Shell: Polypropylene Top Cover: Polypropylene Bottom Cover: Polypropylene O-Ring/Gasket: Buna-N / Santoprene Size: 10" & 20"	Polypropylene Polypropylene Polypropylene Buna-N / Santoprene 10"	Polypropylene Polypropylene Polypropylene Buna-N / Santoprene 10" & 20"
	Pre-filter: String Wound 5 Micron Post Filter: 20 micron Polypropylene Media: Coconut shell based GAC	String Wound 5 Micron 20 micron Polypropylene Coconut shell based GAC KDF	String Wound 5 Micron 20 micron Polypropylene Coconut shell based GAC
Operations	Pressure: 120 psi (Max) Flow rate: 2 gpm Temperature: 50°C (Max)	120 psi (Max) 2 gpm 50°C (Max)	120 psi (Max) 4 gpm 50°C (Max)



Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality Adequate disinfection is mandatory before consumption

Carbon Block Cartridges

Most reliable and effective bad taste & odor removal
Coconut shell based activated carbon
Better reduction of VOC's than most competitor products
True depth design for maximum contact time
Prefilters for coarse particle removal extends the life of cartridges



Bongoût Series cartridges effectively reduce bad taste and odor from raw water which is usually due to organic pollutants including chlorine.



The carbon is compressed with a high end technology giving appropriate micron rating for effective performance.

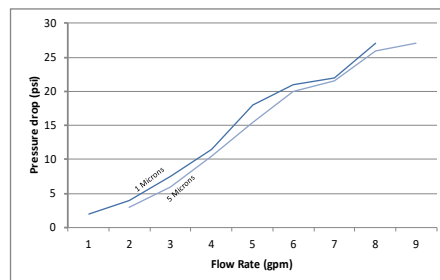
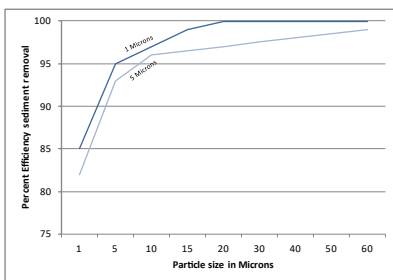
The prefilter allows coarse filtration for raw water, thus protecting the media from excessive dust clogging.

The Granular Activated Carbon is coconut shell based which is activated and acid washed for maximum efficacy. The standards are strict with minimum Iodine number of 1050 and a minimum Molasses number of 200. This quality assures performance in taste and odour removal and organics reduction.

High abrasion resistance gives our carbon the ability to withstand transporting without dust formation.

Cartridge life depends on feed water quality and can be extended by use of a sediment removal prefilter to prevent premature clogging of the media.

	Regular	Jumbo
		
Top Cover:	Polypropylene	Polypropylene
Bottom Cover:	Polypropylene	Polypropylene
O-Ring/Gasket:	Buna-N / Santoprene	Buna-N / Santoprene
Size:	10" & 20"	10"
Inner core:	Acid washed Carbon Block	Acid washed Carbon Block
Outer core:	Spun layered prefilter	Spun layered prefilter
Pressure:	120 psi (Max)	120 psi (Max)
Flow rate:	2 gpm	2 gpm
Temperature:	50°C (Max)	50°C (Max)



Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality. Adequate disinfection is mandatory before consumption.

Dual Purpose Cartridges

- Ideal for space saving filters
- Sediment removal in stage-1
- Reliable and effective bad taste & odor removal in stage-2
- Coconut shell based activated carbon
- Better reduction of VOC's than most competitor products
- True depth design for maximum contact time
- Prefilters for coarse particle removal extends the life of cartridges



Bongoût Series cartridges effectively reduce bad taste and odor from raw water which is usually due to organic pollutants including chlorine.

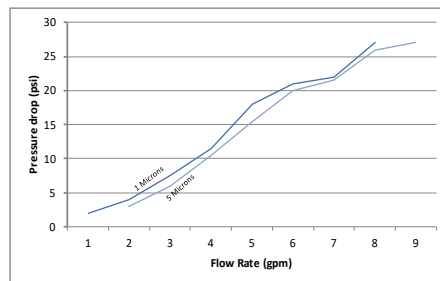
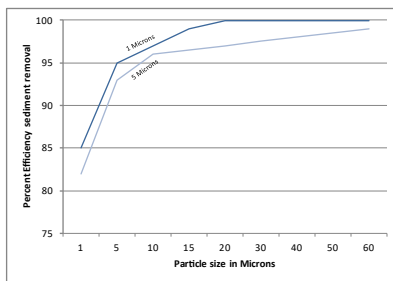
The carbon is compressed with a high end technology giving appropriate micron rating for effective performance.

The prefilter allows coarse filtration for raw water, thus protecting the media from excessive dust clogging.

The Granular Activated Carbon is coconut shell based which is activated and acid washed for maximum efficacy. The standards are strict with minimum Iodine number of 1050 and a minimum Molasses number of 200. This quality assures performance in taste and odour removal and organics reduction.

High abrasion resistance gives our carbon the ability to withstand transporting without dust formation.

Cartridge life depends on feed water quality and can be extended by use of a sediment removal prefilter to prevent premature clogging of the media.



Material of construction

Gold		
Carbon Block	Core:	Coconut shell based GAC
	Gasket:	Buna-N (FDA Food Grade)
	Netting:	Polypropylene
	End Caps:	Polypropylene
	Filter Wrap:	Polypropylene

Operating Conditions

Operating Pressure:	15 psi (Min) 125 psi (Max)
Temperature:	40°F to 180°F (Max)
Differential:	90 psi (Max)

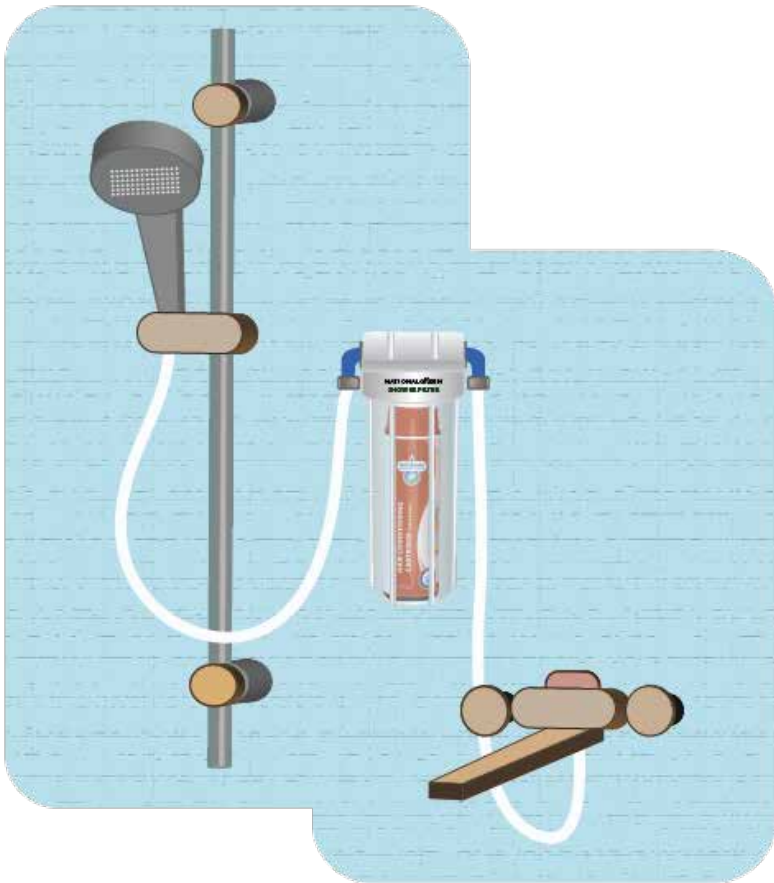
Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality. Adequate disinfection is mandatory before consumption.

Hair Conditioning Cartridge

National Green Hair Conditioning Cartridges are designed to fit the Shower Filter, which provides clean, chemical free water for essential bathing.

These cartridges are pre-built with 1 micron filter, and Softener resin, removing all sediments and hardness from line water. The water becomes more soft and with enhanced wettability.



An average human body absorbs more chlorine through the skin and lungs while showering than while drinking tap water. This can irritate your lungs and have seriously harmful side effects over time.

Chlorine also strips protein from your skin and hair, leaving it dry and itchy. Get relief with NESCO shower filters with bacteriostatic KDF-55, Activated carbon and Cationic resin. Together, they remove chlorine and hydrogen sulfide, reduce heavy metals and naturally soften the water.

- Softens water for healthier, softer-feeling skin and less brittle hair
- Reduces dryness of scalp and skin
- Longer-lasting, more vibrant hair color
- Less use of artificial shampoos and hair creams
- Rich lather makes bathing a joy
- Ease the effects of chlorine exposure on pulmonary diseases such as asthma – no toxic fumes!
- No smell or bad taste in water



Material of construction

Gold Series		
Shower Filter Cartridge	Core:	High Impact Polystyrene
	Top Cover:	High Impact Polystyrene
	Bottom Cover:	High Impact Polystyrene
	Gasket:	Buna-N (FDA Food Grade)
	Pre-filter:	Non-Woven Filter Media
	Post Filter: Media:	5 micron Polypropylene KDF Coconut shell based GAC Cation Resin

Operating Conditions

Operating Pressure:	15 psi (Min) 125 psi (Max)
Temperature:	50°F (Max)

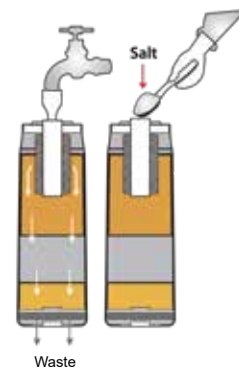
Instructions for cartridge recharging

Cartridge should be recharged once in a month or after 200 gallons

Step-1
Fill the Cavity of the filter with Table Salt (Sodium Chloride)

Step-2
Place the cartridge under the tap, and run water very slowly

The total process will take 5-7 minutes



Performance capacity depends on system design, flow rate and certain other application conditions. BonGout series cartridges will have very small number of carbon fines. After change of cartridges follow the instructions for flushing of cartridges to remove any loose particles before usage. Standard flushing for minimum 30 seconds is recommended.

Important: Do not use with water that is microbiologically unsafe or of unknown quality Adequate disinfection is mandatory before consumption



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