ONE Cartridge Tank™ One® Cartridge

ONE[®] SERIES Cartridge Tank

Introducing our Revolutionary New GWS ONE[®] Cartridge Tank Filtration System.



Say goodbye to small and inefficient housings. Get rid of expensive stainless steel housings. The GWS ONE° Cartridge Tank offers extended life and service, and a more cost-effective and efficient filtration solution.

Utilizing this patented industry exclusive liner design and no tools necessary snap-ring design; Full radial seal top and bottom caps make replacement simple. GWS ONE® Cartridge Tank makes it easy to access and remove the internal filtration solution.

Lightweight and cost effective with multiple configuration options, from high flow commercial/industrial applications to stand-alone residential Point-of-Entry (POE) installations for city and well water applications, this is the filtration solution of the future...100% non-metallic! The Cartridge Tank® is a high performance, NSF 42 listed device and has been tested to 100 psi operating pressure with 4:1 Burst Safety Factor.





APPLICATIONS

- $_{\bigcirc}\,$ Ideal for Residential, Food Service, Rental Fleets, Commercial and Industrial Applications
- Make-up Water, RO Pre-filtration, Cooling Towers, Chill Water Loops, Metal Finishing
- O Process Water (turbidity, particulate, colloidal suspensions)
- $\odot\,$ Reduction in frequency of replacing common 2 % or 4 % " housings...Bigger is Better
- Reduction of unwanted bad taste and odor from potable drinking water
- City water applications where water softeners are a hard sell...as a replacement option of pitcher, faucet, bottled water and/or refrigerator filters
- Other water-based fluid solutions

Benefits

Lightweight and cost effective housing with high chemical compatibility. Simple and easy change-out of cartridges.

No Tools, Means NO TOOLS!

Match the filtration solution

with flow rate requirements

Extended service life, contaminant removal, and dirt holding capacity

Low pressure drop = high flow

Features

100% non-metallic! Patented no-tools necessary snap-ring design Multiple filtration solutions Full 1 ¼" and 2" plumbing connection options Large capacity filter configurations



Blue Filtration Series

The Blue Filtration Series incorporates carbon block filter technology that is highly effective at reducing bad taste and odor from potable drinking water. The filters are made using high performance coconut shell carbon, which has more micropores compared to other types of carbon.

These carbon block filters deliver a product with superior adsorption capacity and kinetic dynamics. These high capacity filters provide cost effective water filtration solutions in a filter size and configuration that offers ease-of-use, extended service life and capacity, at low pressure loss.

All components and materials are FDA approved, and manufactured from NSF 61 Certified Coconut Shell carbon, and are California Prop 65 Compliant.

The Chloramine Block is a proprietary media with an enormous number of catalytically active Nitrogen Groups for highly efficient reduction of chloramines. This enhanced catalytic functionality has FIVE times more capacity for chloramines reduction than standard carbon blocks.

Each filter comes with a unique handle designed top cap for light-weight and easy removal, a bag for proper disposal, and a double o-ring bottom connection that inserts into the ONE^{\otimes} Cartridge Tank plumbing adapter.



Features

High Performance Carbon

Unique binder system

Proprietary manufacturing process

Outer Wrap of Polypropylene Netting of Polyethylene

Applications

Residential, Food Service,Commercial and Industrial applications Reducing bad taste, odor, chlorine and chloramine taste Polishing or pre-filters in applications requiring fine filtration and high capacity

Benefits

Exceptionally low pressure drop

High dirt holding capacity

Excellent contaminant reductions



CT-03-CB: 3 Micron Carbon Block, High Capacity

CT-20-CB: 20 Micron Carbon Block, High Porosity, Low Pressure Drop

CT-03-CB-AMINE: 3 Micron Carbon Block, Chloramine Reduction

Configurations

To treat >250,000 gallons (946,353 Liters) of water @ 15 gpm (56.78 LPM) with greater than 90% reduction, estimated capacity using 2ppm of free chlorine.

To treat >150,000 gallons (567,812 Liters) of water @ 7 gpm (26.50 LPM) with greater than 90% reduction, estimated capacity using 2ppm of free chlorine.

To treat >50,000 gallons (189,271 Liters) of water @ 7 gpm (26.50 LPM) with greater than 85% reduction, estimated capacity.

Yellow Filtration Series

The Yellow Filtration Series are dual gradient double pleated filtration solutions for extended life and use, with filtration levels of 5 and 20 microns. This Series offers a combination filter composed of an outer layer of Polypropylene String with a Melt blown Polypropylene core. The precise wound pattern provides greater surface area, higher dirt-loading capacity and greater efficiency than standard wound filter cartridges. As a dual media filter, they provide a cost effective, extended-life product capable of capturing a broad range of particulates with high service flow rates greater than 30+gpm with less than 15 Delta P.

Features

Outer pre-filter manufactured using 100% polypropylene yarn

Precision pattern captures 20 or 50 microns or larger

Extends service life of inner filter

Outer filter captures fine sediment, sand, silt, rust and scale particles.

Melt blown inner filter manufactured using thermally bonded polypropylene fibers

Applications

Potable water, Food/beverage, Pre RO, Fine chemicals, Electronics, Metal finishing, Plating solutions, Oxidizing agents, Corrosive fluids, Gase Concentrated acids and alkalis

Benefits

Microorganism resistant
NSF component
Nominally rated as stated
High purity
Excellent chemical resistance
High dirt holding capacity
Graded density

The large diameter pre-filter reduces particulate loading on the post filter allowing it to perform at higher velocities, capturing fine sediment, sand, silt, rust and scale particles of 50 or 20 microns. This equates to higher particulate reduction and added loading capacity.

The Meltblown core captures 20 or 5 micron particles, (depending on the filter configuration), this dual combination filter extends the life of the inner-cartridge by eliminating premature caking and prevents down stream media migration common in string cartridges.

Each filter comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection that inserts into the ONE[®] Cartridge Cartridge Tank plumbing adapter.



Configurations

CT-2005-SWMB: External 20 Micron String Wound pre-filter, with 5 Micron Meltblown Core

CT-5020-SWMB: External 50 Micron String Wound pre-filter, with 20 Micron Meltblown Core

ONE Cartridge Tank™ One® Cartridge

Red Filtration Series



The Red Filtration Series are high flow rate pleated filtration solutions for extended life and use, with filtration levels of 1 Absolute, 5, 20, 50, and 150 microns, along with an activated carbon (PAC) solution as well. The filters are designed with a large filtration layer, extending filtration level contamination and service life, while achieving high flow rates up to 150 GPM (568 LPM) and low pressure drop. The filters will outperform competitive filtration solutions in all turbidity applications including silt, rust, and other particle filtration. The Red Series also provides lower shear water velocity as the raw water passes through the filter, allowing for more contact time and interaction with the extensive surface area of the filters. This results in higher water quality and longer life of the filtration system.

A direct replacement for expensive stainless steel housings used in commercial RO pre-filtration, Process Water, Cooling Towers, and other Commercial and Industrial applications, and exclusively designed for the ONE[®] Cartridge Tank, these filters have significant surface area, low pressure drop, and high flow rate capabilities. The filters are ideal as polishing or prefilters in applications requiring fine filtration and high capacity. Utilizing 100% cellulose free media and cleanable from 5 micron and up, these are the commercial filtration solutions of the future!

Each filter comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring connection. All components and materials are manufactured from NSF 61 and FDA Certified materials.

Low Pressure Drop ONE[®] Filters are designed to minimize pressure drop by using 2" pipe fittings and large diameter center tubes.



Configurations

- CT-COMM1A: 1 Micron Absolute Pleated PP Cartridge
 - CT-COMM05: 5 Micron PP Pleated Cartridge
 - CT-COMM20: 20 Micron PP Pleated Cartridge
- CT-COMM-CARB: Pleated Activated Carbon Cartridge
 - CT-COMM50: 50 Micron PP Pleated Cartridge

CT-COMM150: 150 Micron PP Pleated Cartridge

Features

Durable and chemical resistant Polypropylene filter and cap construction

Double EPDM O-ring seals

Filter Belly Bands

Unique filter handle design

Applications

Ideal for Residential, Food Service, Rental Fleets, Commercial and Industrial Applications, Make-up Water, RO Pre-filtration, Cooling Towers, Chill Water Loops, Metal Finishing, Process Water (turbidity, particulate, colloidal suspensions) Community Water, Livestock, or Poultry, Water Systems Replacement of bag filters with more surface area and capacity as well as other water-based fluid solutions

Benefits

Extended service life, contaminant removal, and dirt holding capacity Low pressure drop = high flow! Insures no bypass of contaminants and high chemical compatibility Ease of filter removal from

housing

Bacteria and chemical resistantunder high flow or contaminant load applications

Prevent collapsing of filters under high flow or contaminant load applications

Purple Filtration Series

The Purple Filtration Series are high flow rate meltblown polypropylene filtration solutions for extended life and use, with filtration levels of 5 and 20 microns. The filters are designed with a large surface area depth filtration design, extending filtration level contamination and service life, while achieving high flow rates up to 100 GPM (380 LPM) and low pressure drop. The filters will outperform competitive filtration solutions in all turbidity applications including silt, rust, and other soft particle filtration. The Purple Series also provides lower shear water velocity as the raw water passes through the filter, allowing for more contact time and interaction with the extensive surface area of the filters. This results in higher water quality and longer life of the filtration system

Features

Durable and chemical resistant Polypropylene filter and cap construction

Double EPDM O-ring seals

Unique filter handle design

Applications

Whole house filtration. Commercial filtration, Industrial filtration, Prefiltra-tion for reverse osmosis equipment, Community water systems, Sea water applications due to their non-corrosive construction, Replacement for bag filters with more filter area, A convenient alternative to multiple cartridge filters Water for livestock and poultry

Benefits

Extended service life, contaminant removal, and dirt holding capacity
Low pressure drop = high flow!
Prevent collapsing of filters under high flow or contaminant load applications contaminants and high chemical compatibility
Bacteria and chemical resistant contaminants and high chemical compatibility
Ease of filter removal from housing
Insures no bypass of contaminants and high chemical compatibility

A direct replacement for expensive stainless steel housings used in commercial RO pre-filtration, Process Water, Cooling Towers, and other Commercial and Industrial applications, and exclusively designed for the ONE[®] Cartridge Tank, these filters have significant surface area, low pressure drop, and high flow rate capabilities.

The filters are ideal as polishing or pre-filters in applications requiring fine filtration and high capacity. Utilizing 100% polypropylene media, these are the commercial filtration solutions of the future!

Each filter comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring connection. All components and materials are manufactured from NSF 61 and FDA Certified materials.



Filter Performance



Configurations

CT-COMM05-MB: 5 Micron Meltblown

CT-COMM20-MB: 20 Micron Meltblown

Orange Filtration Series

The Orange Filtration Series are dual gradient double pleated filtration solutions for extended life and use, with filtration levels of 5, 10 and 20 microns. The filters are designed with a larger pre-filtration layer externally and the smaller internally, extending filtration level contamination and service life, while achieving high flow and low pressure drop.



The filters will outperform competitive filtration solutions in all turbidity applications including silt, rust, and other particle filtration. The Orange Series also provides lower shear water velocity as the raw water passes through the filter, allowing for more contact time and interaction with the extensive surface area of the filters. This results in higher water quality and longer life of the filtration system.

Each filter comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection that inserts into the ONE[®] Cartridge Tank plumbing adapter.



Features

Dual Gradient Double Pleated

Double Buna-N O-ring seals

Filter Belly Bands

Durable Polyester filter and Polypropylene cap construction

Applications

Residential, Food Service, Rental Fleets, Commercial and Industrial Applications, Makeup Water, RO Prefiltration, Cooling Towers, Chill Water Loops, Metal Finishing, Process Water, Other water-based fluid solutions

Benefits

Extended service life, contaminant removal, and dirt holding capacity Low pressure drop, high flow!

Insures no bypass of contaminants and high chemical compatibility

Prevent collapsing of filters under high flow or contaminant load applications

Bacteria and chemical resistant

Better Filtration

Extended Service Life...6, 12, 18, or 24 months, versus 1-3?: The total surface area of the dual gradient Orange Series is approximately 100 ft2, as compared to a typical single layer 2 ½"x20 filter, which has approximately 7ft2 of filter media area, and a 4 ½"x20 which is approximately 16ft2. We have nearly 6.5x open area compared to standard 4.5x20 filters... 100ft2 vs. 16ft2 and nearly 14.5x open area compared to standard 2.5x20 filters...100ft2 vs. 7ft2. Extended Service Life!

Configurations

CT-1005: External 10 Micron Pleated pre-filter, with 5 Micron Pleated Internal Layer

CT-2010: External 20 Micron Pleated pre-filter, with 10 Micron Pleated Internal Layer

CT-5020: External 50 Micron Pleated pre-filter, with 20 Micron Pleated Internal Layer

Green Filtration Series

The Green Filtration Series are electropositively charged dual gradient double pleated filtration solutions that successfully remove contaminants from 1 to 0.2 microns, featuring NanoAl^M media. The filters are designed with a larger 20 micron pre-filtration layer externally and the charged media internally, extending filtration level contamination and service life, while achieving high flow and low pressure drop.

The filters will outperform competitive filtration solutions in all turbidity applications including insoluble scale, Fe3, bacterial iron slime, colloidal solids, silt, rust, and other particle filtration, resulting in higher water quality and longer life of the filtration system.

Features

Dual Gradient Double Pleated Filters with electropositively charged NanoAl[™] media

Double Buna-N O-ring seals

Filter Belly Bands

PAC solution options

Agion® antimicrobial technology

Applications

Primary Filtration, Make Up Water, Polishing Filters, RO Prefiltration, Process Water, Waste Water, Cooling towers, Chill Water loops

Benefits

Successfully remove contaminants (1 - 0.2 microns) Finer particle retention, higher flow rate and loading capacity, lower pressure drop. Ensures no bypass of contaminants and high chemical compatibility Prevent collapsing of filters under high flow Reduces bad taste and odor

from potable drinking water

Provides built-in protection by working 24/7 resisting the growth of microbes The Green Series of pleated filters features a thermally bonded blend of micro-glass fibers & cellulose, infused with nanoalumina fibers in a non-woven matrix that creates an electropositively charged depth filter media. When assembled into a pleated cartridge, our solution offers a unique combination of efficiency, capacity, flow rate, & low pressure drop that allow this nonwoven media to filter like a NF polymeric membrane, at levels unmatched in today's filtration marketplace. All filters feature the use of Agion[®] antimicrobial technology that provides built-in protection by working 24/7 resisting the growth of microbes.

Each filter comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection that inserts into the ONE[®] Cartridge Tank plumbing adapter.





Nano-Alumina Fibers Mean Diameter: 2nm, Length 200-300nm

Filter Close-up



Configurations

CT-20xNanoAl-AG: External 20 Micron Pleated pre-filter, with NanoAl™ Pleated Inner Filter w/ Agion[®] Biostat

CT-20xNanoAl-PAC-AG: External 20 Micron Pleated pre-filter, with NanoAl PAC Pleated Inner Filter w/Agion® Biostat and Carbon Block Core

White Filtration Series



The White Filtration Series is a unique and high capacity granular media bottle that allows incorporation of multiple media options and solutions to be used with the series. This filter series is a 0.5 ft3 empty bottle for filling of granular filtration media. This GWS ONE® Cartridge Tank filter series is ideal for a wide range of Residential, Food Service, Commercial, and Industrial applications, and can be used for multiple applications from Service DI, POE for city or well-water installations, Rental Programs, Exchange systems, highpurity pre- or post-filtration applications, etc...the options, configurations, and solutions are endless.

The design also incorporates the patented Vortech® full distributor plate technology, providing uniform distribution and utilization of the media bed along with maximum efficiencies and service flow rates, giving system design maximum flexibility whether installed in up-flow or down-flow service. A removable Top Cap has a locking feature that can be used for limiting access to the internal medias by the end-user, and special Rings on the bottom of the bottle allow for ease of hanging of the cartridge for easy change-out of medias in applications like Service DI Exchange.

The White Series is also available in a Mid-Vortech® configuration that splits the cartridge chambers equally, to 0.25 ft3 per chamber, for separation and use of different medias of which increases the efficiency and usage of the media bed. Each filter comes with a unique handle designed top cap for lightweight and easy removal, and a double o-ring bottom connection that inserts into the ONE® Cartridge Tank plumbing adapter.

Features

0.5 cuft empty media Polyethylene construction Vortech® distributor plate Locking or Removable top cap Rings on bottom of bottle Double Buna-N O-ring seals Mid-Vortech® distributor plate option

Applications

Residential, Food/Beverage Service, Rental Fleets, Service DI Exchange, Plating solutions, Commercial and Industrial App-lications, Metal finishing, Oxidizing agents, Corrosive fluids. Electronics, Pre-RO, Process Water, Waste Water, Cooling Towers, Makeup Water, Polishing Filters, Reducing unwanted bad taste and odor, chlorine and chloramine taste and odor

Benefits

Extended service life and high capacity contaminant removal

High chemical resistance

Low pressure drop, high flow Separation of multi-media configurations

Up-flow or down-flow service and full utilization of the media bed

Ensures no bypass of contaminants and high chemical compatibility



Down Flow

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Mixed Bed DI

▽ Softening Resin

Calcite

4 KDF 85

Up Flow



CT-MEDIA-05: Full 0.5 ft3 configuration, able to be filled with any media for up-flow or down-flow service due to use of Vortech® technology. CT-MEDIA05-MID:Full 0.5 ft3 configuration with Mid-Vortech® separation plate, able to be filled with any two types of media for up-flow or down-flow service, due to use of Vortech® technology.