AquaSmart

ULTRA~D™

SUBMICRON DEPTH FILTRATION

Aqua Smart Los Cabos announces its newest line of filters, The ULTRA-D Submicron Depth Filtration Series, which are manufactured using a proprietary, patented, electro-adsorptive media technology, capable of removing submicron pathogens and inorganic contaminants through electro-adhesion and ion exchange.

This technology makes it possible for a nonwoven media to produce filtration efficiency comparable to ultra membrane filtration but at very low pressure drop, with high flow rates and high loading capacity working equally well in fresh, brackish or salt waters.

The **ULTRA-D** media consists of coated micro-glass fibers produced using a wet laid nonwoven manufacturing technology. The base media is laminated between layers of spun-bond to provide both strength and pleat support. The media in the **ULTRA-D** filter is NSF 61-approved (Drinking Water System Components - Health Effects), and USP Class VI testing and endotoxin testing. This media has been specifically engineered to have an average pore size of 2 microns and a mean flow pore of 0.7 microns. This allows the naturally occurring charge field to affect the total volume of the individual pores, as well as virtually the entire void volume of the filter media itself.

The media in these cartridges efficiently retain inorganic and organic particulates, cell debris, endotoxins, virus, proteins, many colloids, bacteria and inorganic submicron particulates. Contaminants are removed by being exposed to a torturous path through the media, depth and the powerful electropositive charge.

Applications for and industries benefitting from the ULTRA-D filtration process:
Residential use where cost effective systems must be used and presence of pathogenic-laden water is of ongoing concern.

- Food and beverage industry for high purity water
- Pharmaceutical industry for high purity water
- Commercial pre-RO and ultra filtration treatment to sustain the life of the membranes
- Greywater recycling for removal of pathogens
- De-salination for pre-filtration
- Other high purity applications
- Water re-cycling treatment for circuit board industry

ULTRA-D Submicron Filter Series is NSF/ANSI 42- and 61- certified and UPC-certified by the IAPMO organization.

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THE FOLLOWING CONTAMINANTS WERE TESTED AND CERTIFIED BY A THIRD PARTY LABORATORY IN THE UNITED STATES

The ULTRA-D filter reduces or removes the following pathogens:

- >99.99% viruses (polio, rotovirus, norovirus, etc.)**
- >99.99% bacteria (e coli, legionella, pseudomonas, etc.)**
- >99.95% cysts (giardia, cryptosporidium, etc.)**
- **Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

The ULTRA-D filter removes or reduces the following heavy metals:

- >95% Lead**
- >80% Ferrous Iron**
- >95% Arsenic V**
- >95% Cadmium**
- >85% Chromium**
- >75% Selenium**
- >60% Mercury

**Tested by a certified laboratory in the U.S. (testing was done at 6.5pH)

The ULTRA-D filter removes or reduces the following organic and inorganic chemicals:

- Chlorine (carbon version)
- Bromine (carbon version)
- Iodine (carbon version)
- VOCs (volatile organic compounds)
- PCBs and BPA
- Residual pharmaceuticals
- Biofouling precursors: organic acids, proteins, polysaccharides.