LANCASTER
WATER TREATMENT

X-FACTOR SERIES LX - AQUANUE™ AERATION FILTERS

AN ECONOMICAL, SIMPLIFIED WAY TO ELIMINATE HYDROGEN SULFIDE GAS, IRON, MANGANESE AND NUISANCE BACTERIA WITHOUT THE USE OF CHEMICALS.

FEATURES

- Treats water to protect pipes, faucets, water heaters, boilers and all appliances requiring the use of water
- Flow rates that won't disrupt household water pressure
- Simple and easy to run with high-efficiency operation
- Simplified single-tank installation
- Lancaster designed state-of-the-art control valve
- Plated-tank technology provides 2.5x or more open surface area of traditional distributors for a more efficient backwash

HYDROGEN SULFIDE & IRON (CATALYTIC CARBON)

The Lancaster AquaNue LXCTAIR is a greener, environmentally friendly, chemical-free way to eliminate two of the most troublesome water quality challenges: hydrogen sulfide (rotten egg odor) and lower levels of iron.

Oxidation of iron and hydrogen sulfide gas is initiated as the water passes through a compressed pocket of air. Dissolved oxygen-enriched water now continues through a catalytic media, enhancing the oxidation reaction and producing precipitates that are easily filtered. Accumulated sediment is backwashed out daily and a new air pocket is formed.

IRON (BIRM)

Lancaster's AquaNue LXIMAIR removes iron, also filtering other suspended matter, preventing rust stains on clothing, appliances and removes taste and color of iron.

HYDROGEN SULFIDE, IRON & MANGANESE (KATALOX LIGHT)

For hydrogen sulfide, higher levels of iron, manganese and sediment, the Lancaster AquaNue LXKATAIR systems are recommended.

This unique light weight, high surface area filtration media utilizes a high concentration MnO2 catalytic coating technique. It provides higher filtration rates, longer service life and reliable performance without producing a disinfection by-product.

HYDROGEN SULFIDE, IRON, MANGANESE & NUISANCE BACTERIA[1] (KATALOX LIGHT & OZONE)

The Lancaster AquaNue LXKATAIRO3 uses the natural powers of ozone to enhance the oxidation and filtration of hydrogen sulfide, iron, manganese and nuisance bacteria from your home's water. Ozone eliminates the need for chemical feed pumps, is 1.5 times stronger than chlorine, more environmentally friendly and safe for septic systems. The Enhanced Oxygen Generator (EOG) creates a controlled amount of ozone in the filter, increasing the oxidation process while providing anti-microbial protection.

1 - Nuisance bacteria refers to iron and sulfate reducing bacteria which are harmless to human health.

AQUANue™
chemical free water filtration

X-FACTOR SERIES LX - AQUANUE™ AERATION FILTERS

LXCTAIR: Engineered to utilize aeration, oxidation, and mechanical filtration to remove hydrogen sulfide and low levels of iron, without the use of salt or chemicals.

LXIMAIR: Engineered to utilize aeration, oxidation, and mechanical filtration to remove iron without the use of salt or chemicals.

LXKATAIR: Engineered to utilize aeration, oxidation, and mechanical filtration to remove hydrogen sulfide, higher levels of iron, manganese, and sediment without the use of salt and chemicals.

LXKATAIRO3: Engineered to utilize ozone for enhanced oxidation of H2S, Fe, and Mn while providing anti-microbial protection against "nuisance" bacteria slime build-up and odors.

Model No.	Mineral (Cu. Ft.)	Service Flow GPM[1, 2, 3]	Backwash GPM[4, 5]	Mineral Tank (Dia. x Ht.)	Influent Limitations
For Hydrogen Sulfide & Iron Removal					
7-LXCTAIR-1B	Catalytic Carbon (1.0)	2.7 to 5.5	5.3	10" x 54"	• Hydrogen sulfide up to 5 ppm • Iron up to 2 ppm • Effective with pH as low as 5.8. Removing Iron - recommend pH 7.0 or higher but below 8.5
7-LXCTAIR-2B	Catalytic Carbon (2.0)	5.4 to 10.7	10.0	14" x 65"	
7-LXCTAIR-3B	Catalytic Carbon (3.0)	7.0 to 14.0	15.0	16" x 65"	
For Iron Removal					
7-LXIMAIR-1B	Birm (1.0)	2.7 to 4.6	5.3	10" x 54"	• NO oil, polyphosphates or hydrogen sulfide present! • Organic matter less than 5 ppm TOC • pH must be 6.8 or higher but below 8.5 for iron removal • Chlorinated water NOT recommended (less that 0.5 ppm) • Ozone injection NOT recommended
7-LXIMAIR-2B	Birm (2.0)	5.4 to 9.1	10.0	14" x 65"	
7-LXIMAIR-3B	Birm (3.0)	7.0 to 11.9	15.0	16" x 65"	
For Hydrogen Sulfide, Iron & Manganese Removal					
7-LXKATAIR-1B	Katalox Light (1.0)	2.7 to 4.6	5.3	10" x 54"	• Hydrogen Sulfide up to 5 ppm • Iron up to 6 ppm • Manganese up to 1 ppm • High concentration of contaminant may require upstream dosing of H2O2, KMnO4 or chlorine to accelerate catalytic oxidation • DO NOT install on water supplies containing organic matter (Tannins) • Effective with pH as low as 5.8. Removing Iron - recommend pH 7.5 or higher but below 8.5, Manganese - recommend pH 8.5 but below 8.5 if Iron is present
7-LXKATAIR-2B	Katalox Light (2.0)	5.4 to 9.1	10.0	14" x 65"	
7-LXKATAIR-3B	Katalox Light (3.0)	7.0 to 11.9	15.0	16" x 65"	
For Hydrogen Sulfide, Iron, Manganese & Nuisance Bacteria Removal					
7-LXKATAIRO3-1B	Katalox Light (1.0)	2.7 to 4.6	5.3	10" x 54"	• Hydrogen Sulfide up to 5 ppm • Iron up to 6 ppm • Manganese up to 1 ppm • DO NOT install on chlorinated water supplies • DO NOT install on water supplies containing organic matter (Tannins) • Effective with pH as low as 5.8. Removing Iron - recommend pH 7.5 or higher but below 8.5, Manganese - recommend pH 8.5 but below 8.5 if Iron is present
7-LXKATAIRO3-2B	Katalox Light (2.0)	5.4 to 9.1	10.0	14" x 65"	

1. Catalytic Carbon service flow rates based on Continuous (5 GPM/sq.ft.) to Intermittent (Peak) (10 GPM/sq.ft.).
2. Birm and Katalox Light service flow rates based on Continuous (5 GPM/sq.ft.) to Intermittent (Peak) (8.5 GPM/sq.ft.).
3. Lower service flow rates are recommended for increased contact time to produce higher quality water. Higher flow rates are possible, however, filtration quality may be compromised.
4. Backwash flow rates based on DLFC sizes to meet approximately 10 GPM/sq.ft
5. Well pump capacity must be equal to or greater than the required backwash flow rate to assure proper backwash. If the well pump cannot provide the required backwash flow rate, consider two smaller filters, parallel installation with offset backwash times.