



# X-Factor Series LX

## AquaNue AERATION FILTERS

### LINE OVERVIEW

The Lancaster AquaNue 1000 Series is a greener, environmentally friendly, chemical-free way to eliminate lower levels of two of the most troublesome water quality challenges: hydrogen sulfide (rotten egg odor) and iron.

For strong sulfur odors and higher levels of iron (up to 10ppm), the Lancaster AquaNue 200 and 3000 systems are recommended.



### HOMEOWNER BENEFITS

#### **AquaNue™ 1000:**

**An economical, simplified way to eliminate hydrogen sulfide gas and iron without the use of chemicals, offering the following:**

- AquaNue Catalytic Media: Our high-grade AquaNue catalytic media units increase catalytic function by removing hydrogen sulfide and iron more efficiently
- LXCTAIR Units eliminate up to 5 ppm of hydrogen sulfide (rotten egg smell) and up to 5 ppm of iron
- LXIMAIR units offer extremely high iron removal efficiency
- Simplified single-tank installation
- Lancaster designed state-of-the-art control valve

#### **AquaNue™ 2000:**

**No noise when system is in service mode, easily disassembled for cleaning, no chemicals required, offering the following:**

- Oxidizes up to 5 ppm of hydrogen sulfide, eliminating rotten egg smell
- Also oxidizes high levels of iron, up to 10 ppm
- Atmospheric air introduced via an adjustable air injector that assures dissolved oxygen-enriched water
- The non-electric air eliminator tank reduces energy usage
- An automatic backwashing filter is required to collect impurities, ensuring crystal-clear water

#### **AquaNue™ 3000:**

**No pressure losses, more frequent air turnover, no chemicals required, offering the following:**

- Oxidizes extreme levels of hydrogen sulfide gas (rotten egg odor), over 5 ppm
- Also oxidizes extreme levels of iron (stains), over 10 ppm
- The state-of-the-art air compressor adds a controlled amount of air into the water supply, assuring uninterrupted water pressure in the home
- The non-electric air eliminator tank reduces energy usage
- An automatic backwashing filter is required to collect impurities, ensuring crystal-clear water



# X-Factor Series LX

## AquaNue AERATION FILTERS

### WATER TREATMENT PROCESS

#### AquaNue™ 1000:

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.

#### AquaNue™ 2000:

Air is introduced into water stream via an adjustable air injector. Iron is oxidized and hydrogen sulfide gas is converted to a filterable solid and accumulated in the air elimination/contact tank. A float assembly is used to periodically release accumulated excess air. No water is lost to the vent line. A recommended backwashing filter is used to collect and backwash out the accumulated sediment.

#### AquaNue™ 3000:

A small air compressor adds a controlled amount of air into the air elimination/contact tank. As water passes through the air, metals such as iron are oxidized and hydrogen sulfide gas is converted to a filterable solid. Excess air is accumulated and released via a float assembly. No water is lost to the vent line. A recommended backwashing filter is used to collect and backwash out the accumulated sediment. The air compressor runs during the well pump cycle or when water is being called for, giving a high turnover of air.

### 1000 Aeration System

### For Hydrogen Sulfide & Iron Removal

### For Iron Removal Only

Model Number	7-LXCTAIR-1B	7-LXCTAIR-2B	7-LXCTAIR-3B	7-LXIMAIR-1B	7-LXIMAIR-2B	7-LXIMAIR-3B
Mineral (Cu. Ft.)	Catalytic Carbon (1.0)	Catalytic Carbon (2.0)	Catalytic Carbon (3.0)	Birm (1.0)	Birm (2.0)	Birm (3.0)
Service Flow GPM <sup>1,2</sup>	5.0 to 8.0	7.0 to 9.0	10.0 to 12.0	5.0 to 8.0	7.0 to 9.0	10.0 to 12.0
Backwash GPM <sup>3</sup>	5.3	10.0	15.0	5.3	10.0	15.0
Mineral Tank (Dia. x Ht.)	10"x54"	14"x65"	16"x65"	10"x54"	14"x65"	16"x65"
Influent Limitations	<ul style="list-style-type: none"> <li>Hydrogen sulfide up to 5ppm</li> <li>Iron up to 5ppm</li> </ul>			<ul style="list-style-type: none"> <li>No hydrogen sulfide present!</li> <li>pH must be 6.8 or higher for iron removal</li> <li>Chlorinated water NOT recommended (free chlorine concentration less than 0.5ppm)</li> </ul>		

1. When selecting catalytic carbon models, minimum service flow rates are recommended for iron and/or very strong hydrogen sulfide applications to allow for increased contact time.

2. When selecting birm models, service flow rates are considered maximum for intermittent use as recommended for effective iron removal.

3. Well pump capacity must be equal to or greater than the required backwash flow rate to assure proper backwash.



**Air Injector**  
(2000 Series)

### 2000 Aeration System

(includes aeration tank and air injector, additional post filter required)



**Air Compressor**  
(3000 Series)

### 3000 Aeration System

(includes aeration tank and air injector, additional post filter required)

### 115 Volt

Model Number	Service Flow Rate
230-1248A	Up to 10 GPM

Model Number	Service Flow Rate
7-LAER1248-115	Up to 10 GPM
7-LAER1248DA-115*	Up to 10 GPM

### 230 Volt

Model Number	Service Flow Rate
7-LAER1248-230	Up to 10 GPM
7-LAER1248DA-230*	Up to 10 GPM

\*Double aeration for sulfur only, not recommended if iron is present.

### Required Post Filter

### For Hydrogen Sulfide & Iron Removal

### For Iron Removal Only

Model Number	7-LETCT-1B	7-LETCT-2B	7-LETCT-3B	7-LETIM-1B	7-LETIM-2B	7-LETIM-3B
Mineral (Cu. Ft.)	Carbon (1.0)	Carbon (2.0)	Carbon (3.0)	Birm (1.0)	Birm (2.0)	Birm (3.0)
Service Flow GPM <sup>1,2</sup>	5.0 to 8.0	7.0 to 9.0	10.0 to 12.0	5.0 to 8.0	7.0 to 9.0	10.0 to 12.0
Backwash GPM <sup>3</sup>	6.5	10	10	6.5	10	10
Mineral Tank	10x44	13x48	14x65	10x44	13x48	14x65

MEMBER

