

1000 Series



AquaNue™

1000 Series Aeration Filters:

A greener, environmentally-friendly, chemical-free way to eliminate two of the most troublesome water quality challenges: hydrogen sulfide (rotten egg odor) and iron.

Water Treatment Process:

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 precipitate that are easily filtered. Accumulated sediment is backwashed out **daily** and a new air pocket is formed.

System Benefits:

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
- Vortech tank for more efficient backwashing
- Simplified single-tank installation
- No chemicals added to your water
- Lancaster designed state-of-the-art control valve

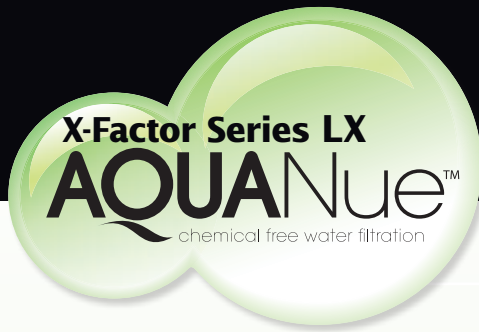


FOR HYDROGEN SULFIDE & IRON REMOVAL

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 ^{1,2}	2.0 to 5.0	4.0 to 7.0	6.0 to 10.0	5.0	7.0	10.0
Backwash GPM ³	5.3	10.0	15.0	5.3	10.0	15.0
Mineral Tank (Dia. x Ht.)	10" x 54"	14" x 65"	16" x 65"	10" x 54"	14" x 65"	16" x 65"
Influent Limitations	<ul style="list-style-type: none"> • Hydrogen sulfide up to 5ppm • Iron up to 5ppm 			<ul style="list-style-type: none"> • No hydrogen sulfide present! • pH must be 6.8 or higher for iron removal • Chlorinated water NOT recommended (free chlorine concentration less than 0.5ppm) 		

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.



2000 & 3000 Series

AquaNue™ 2000 Series Aeration System:

A more thorough aeration system, oxidizing hydrogen sulfide gas when moderate-to-persistent sulfur levels exist (up to 5 ppm) and up to 10 ppm of iron.

Water Treatment Process:

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 can be used to collect and backwash out the accumulated sediment.

System Benefits:

- 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
- The automatic backwashing filter collects impurities, ensuring crystal-clear water

Aeration System

(Includes aeration tank and air injector)

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



Aeration Tank

Post Filtration Tank*
(Required, not included)



Air Injector
(2000 Series)



Air Compressor
(3000 Series)

AquaNue™ 3000 Series Aeration System:

Our most comprehensive and effective aeration system. Recommended when strong sulfur (over 5 ppm) and/or over 10 ppm of iron contaminants exist.

Water Treatment Process:

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 can be 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.

System Benefits:

- 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
- The automatic backwashing filter collects impurities, ensuring crystal-clear water

Aeration System

(Includes aeration tank and air compressor)

115 Volt

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

230 Volt

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

*FOR POST-FILTRATION SEE X-FACTOR SERIES LX FILTERS; DUE TO THE INFLUENCE OF pH VALUE ON AERATION, CATALYTIC CARBON FILTER MEDIA IS STRONGLY SUGGESTED FOR HYDROGEN SULFIDE AND/OR IRON APPLICATIONS. BIRM FILTER MEDIA IS APPLICABLE FOR IRON-ONLY APPLICATIONS; DO NOT USE BIRM IF HYDROGEN SULFIDE IS PRESENT OR IF THE WATER IS CHLORINATED. CONSULT FACTORY FOR POST-FILTRATION RECOMMENDATION.

**DOUBLE AERATION FOR SULFUR ONLY, NOT RECOMMENDED IF IRON IS PRESENT.



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