



Markets

AQUA-FeMn Iron filters can be used in a variety of residential, commercial, industrial and specialty applications.

- Home
- Offices
- Electroplating
- Hospital
- Laboratories
- Hotels
- Car Wash Final Rinse
- Laundry
- Reverse osmosis pre-treatment
- Pharmaceutical manufacturers
- Cosmetics manufacturing plants
- Photographic Processes
- Beverage Processing Plants
- Pressure cleaning
- Textiles and dyeing

Water that is clear when drawn but changes quickly to a yellow or rusty color upon standing indicates presence of ferrous or clear water iron. Iron is found in water in two different forms i.e., soluble, chelated. Iron in its ferrous state is very soluble in water. This iron has not yet been exposed to oxygen and therefore is not "rusted" or oxidized, is totally dissolved in water. However, when exposed to air, it is oxidizes and convert to insoluble ferric form which gives yellow brown colour in water and forms staining color on the surface of sinks, toilets, showers and other plumbing fixtures.

Iron may also be present in water in combination with organic matter. Many natural and man-made organic compounds will react, particularly with ferrous iron, to form heavily colored compounds which can cause severe staining. Water may also produce stains by the action of iron bacteria (living organisms), which feed on iron in water, iron pipes and fittings. They pose no health risk but can be very damaging to the plumbing system. These bacteria form a reddish-brown slime, which may clog pipes and fixtures.

Iron may be found alone or associated with manganese, H₂S and hardness which collectively increases the severity of the problem.

Manganese is very similar to iron in its properties. In fact, they both often occur together with manganese composing a small part of the combination. Manganese can occur in a clear water state, later turning to a colored water state. There are also manganese bacteria which are similar to iron bacteria. Manganese staining does often appear to be darker than iron staining (sometimes black). The distinction between iron and manganese is usually not that important because most methods which successfully treat iron will also treat manganese.

Our **AQUA FeMn iron/manganese filter** produces high quality water free of iron/manganese to suit any household, commercial and industrial application. Mostly, our system uses **Birm** as a specialty media which oxidizes soluble ferrous to insoluble ions. These insoluble ions are then retained on the birm filter media bed. After a preset time, the system is backwashed to push out all insoluble iron to the drain and the system is put back into use. Different type of other media are also available and recommended based on water quality especially containing water bacteria and H₂S.

Usually standard systems are supplied with an automatic control valve. **AQUA-FeMn systems** offer a new dimension in water treatment equipment and have been engineered with both the installer and consumer in mind. Systems are available in many different models and may be customized to fit your application allowing greater flexibility in order to achieve the necessary water quality.

Water 2000 offers a complete line of Fe/Mn removal systems, in either manual or automatic regeneration mode using a multi-port valve design or valve nest design with fiberglass or epoxy-lined steel pressure vessels and come standard with state-of-the-art PLC control. Manganese greensand filter may also be supplied for high concentration FE/Mn removal.

AQUA-FeMn Iron Filter Series

Salient Features

- Carry best quality Birm as the standard iron oxidizing media
- Fiberglass reinforced construction for longer corrosion resistant life.
- Media vessel can be polyethylene-lined fiberglass or rubber-lined steel depending on size and customer requirements.
- Automatic backwash control valve
- Easy connect fitting
- All corrosion free internals.
- 3-6 bar operating pressure
- Simple design for ease of operation setting & service.

Accessories Available

- Other media options also available.
- Wide range of inlet/outlet connection adaptors
- Resistivity light or monitor w/ audio alarm
- Filter cartridges and housings

Benefits

In many cases and applications, Aqua-FeMn automatic backwash Iron filters showed more sense due to the following advantages:

- Simple and efficient
- Crystal clear water
- No more stains
- No more rusty taste or bad colour
- Protect your system for scale and rust buildup
- No hazardous waste or regeneration effluent
- Simple design for ease of operation, setting & service.

Types of Top Mounted Filter Valve



Manual Valves /
In/out Tank Head

Automatic Valve

AQUA-FeMn Iron Filter Series :

Model	Service Flow Rate (lpm)	Inlet/Outlet pipe size (in)	Mineral Tank Size	Media Quantity (Lit)	Approx. Shipping Wt Kg
AQUA-Fe9A	15	0.75"	9" x 44"	45	120
AQUA-Fe13A	30	1.00"	13" x 54"	90	165
AQUA-Fe15A	40	1.00"	15" x 65"	120	200
AQUA-Fe18A	80	1.00"	18" x 65"	150	230
AQUA-Fe21A	100	1.5"	21" x 62"	180	275
AQUA-Fe24A	150	1.5"	24" x 65"	200	290
AQUA-Fe30A	200	2.0"	30" x 72"	250	370

*Other customized models available on request

Please give us a call on 042 3542039-40 or email us at sales@water2000.com.pk and one of our professional team member will happily demonstrate how we can save your significant cost and greatly improve the performance of any of your water or wastewater treatment plant.

