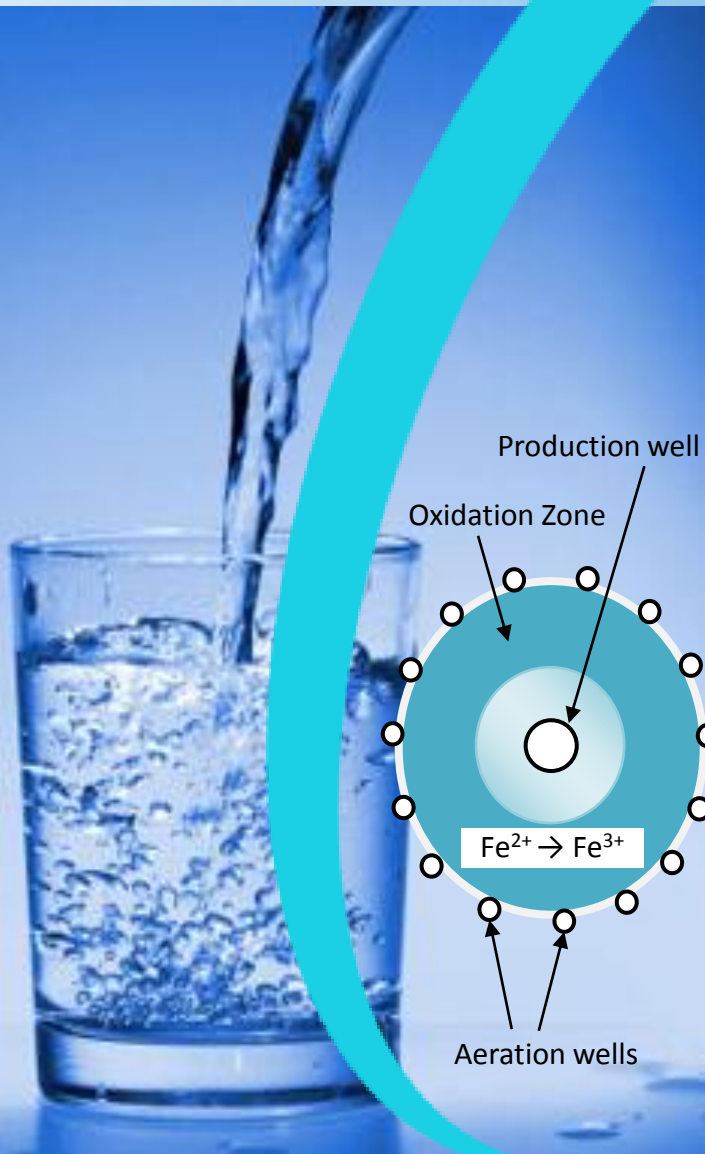




IRONMAX is an efficient and economical water filtration media for the reduction of dissolved iron compounds from raw water supplies. It may be used in either gravity fed or pressurized water treatment systems. Its porous surface allows quick absorption of iron ions; also to extend operating time and decrease backwash frequency.



Advantages:

- ✓ **Regeneration not required**
No chemicals to purchase for maintenance
- ✓ **Extremely high iron removal performance**
- ✓ **Quality and durable media with long life and wide temperature range**

Specifications:

- Package: 30L/ bag

Properties	Spec.
Effective Size	0.6 ~ 0.8 mm
Uniformity Coefficient	< 1.8
Specific Gravity	2.4 ~ 2.6
Bulk Density	1.0 ~ 1.2

- Feed Water Spec.

Feed Water Spec.	Range
Operating pH Range	pH > 6.2
Residual Chlorine	0.3 ~ 0.5 ppm
Min. Bed Depth	100 cm

IRONMAX

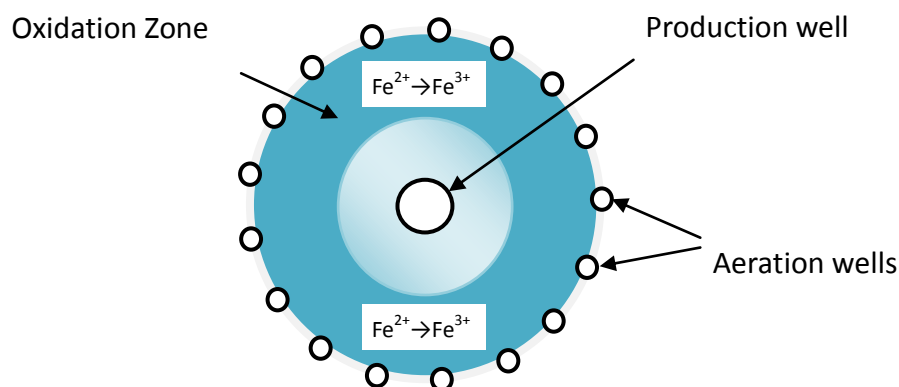
A. Introduction

The Fe^{2+} containing in raw water can be absorbed by sodium form cation exchange resin. However, the Na^+ form cation exchange resins are regenerated by NaCl , but Na^+ cannot help to replace Fe^{2+} which were absorbed in cation exchange resin then further causes a shortened resin service cycle. This condition is called Iron Fouling.

IRONMAX, produced by E. SHORE International, is made of durable and special materials with high-quality manganese which have gone through multi-time mixing and refining; it is capable to remove/ oxidize dissolved iron ions in underground water in an effective way. IRONMAX is also characterized by porosity and this leads to an additional benefit of removing suspended solids from water. Our unique and innovative catalytic/ adsorption reaction can extend operating time and decrease backwash frequency.

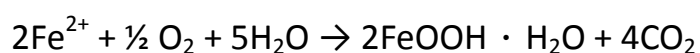
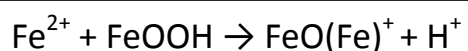
B. Filtration Thesis

IRONMAX is innovative in its catalytic reaction of oxidizing iron ions effectively. Its porous surface allows quick absorption of iron ions; also to extend operating time and decrease backwash frequency. The catalytic reaction processes are as follows:

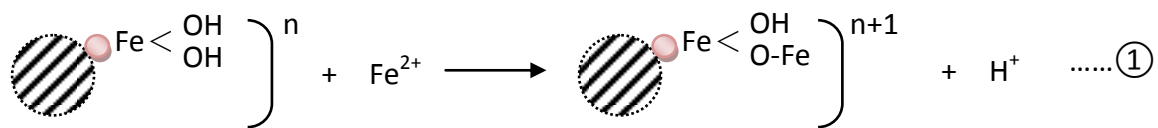


Reaction equation:

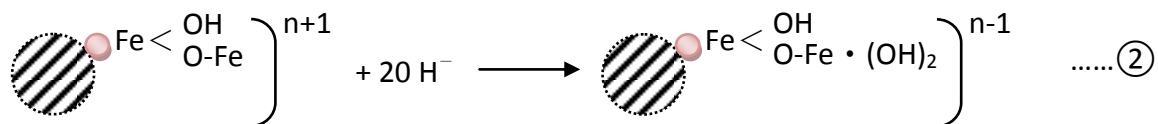
Catalyst (Filter Material): FeOOH



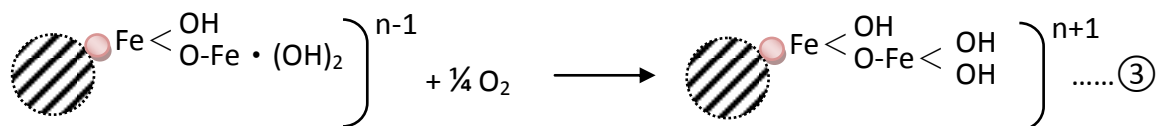
1. Absorption



2. Hydrolysis



3. Oxidation



C. Specifications

IRONMAX (Package: 30L per bag):

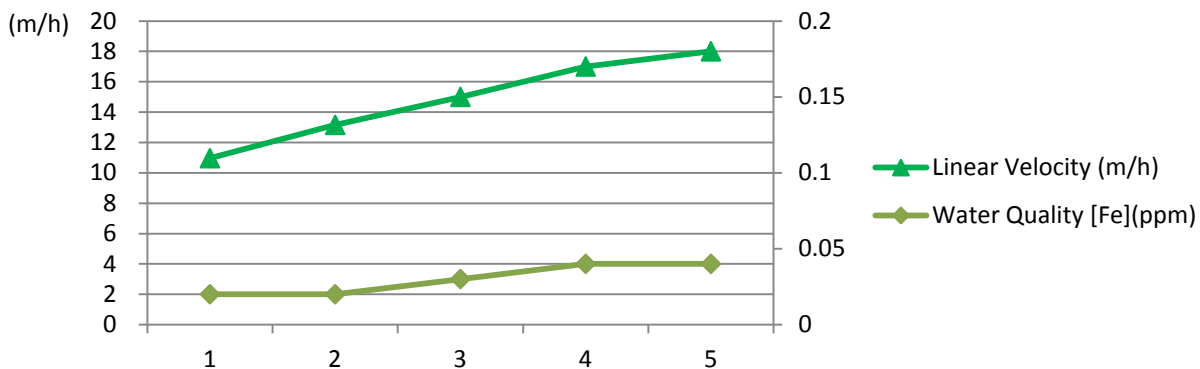
<i>Properties</i>	<i>Spec.</i>
1. Effective Size	0.6~0.8 mm
2. Uniformity Coefficient	< 1.8
3. Specific Gravity	2.4~2.6
4. Bulk Density	1.0~1.2

Feed Water Spec.

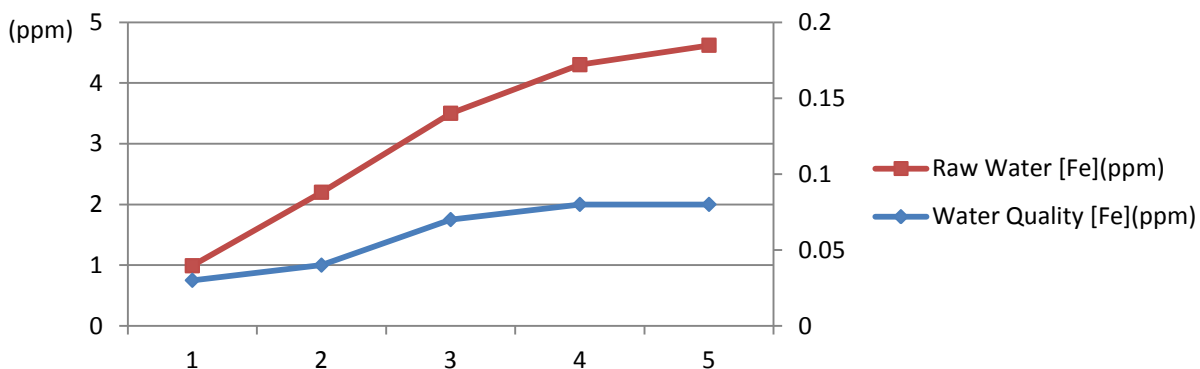
<i>Feed Water Spec.</i>	<i>Range</i>
1. Operating pH Range	pH > 6.2
2. Residual Chlorine	0.3~0.5 ppm
3. Min. Bed Depth	100 cm

Iron Removal Efficiency

1. $[\text{Fe}] < 3.5 \text{ ppm}$, Linear Velocity $< 18 \text{ m/H}$,
Guaranteed Water Quality $[\text{Fe}] < 0.2 \text{ ppm}$



2. $[\text{Fe}] < 5 \text{ ppm}$, Linear Velocity $< 11 \text{ m/H}$,
Guaranteed Water Quality $[\text{Fe}] < 0.2 \text{ ppm}$



3. $5 \text{ ppm} < [\text{Fe}] < 8 \text{ ppm}$,
(Dual Modules) Linear Velocity $< 11 \text{ m/H}$,
Guaranteed Water Quality $[\text{Fe}] < 0.2 \text{ ppm}$

