



OxiMax Solution for Iron, Arsenic & Manganese Removal



Effective Removal of Iron, Arsenic and Manganese.

OxiMax Iron, Arsenic & Manganese Removal systems are engineered as stand alone systems for the removal of iron, manganese and arsenic.

These systems are ideal for eliminating nuisance parameters and improving overall water quality. Our integrated oxidation and filtration technology utilizes a proprietary, highly active, NSF 61 Certified media packaged in a pre-engineered water treatment system for simple installation and use.

It is a granular catalytic material of dark brown to black colour. This colour is given by the manganese oxide in the outer layers of the granules. It facilitates or enhances oxidation and does not get consumed in the reactions. The material does not need regeneration. Only regular back washing with water is sufficient.



A 20,000 ltr/ hr Installation

Advantages

Iron and/or manganese are common in groundwater environments and can produce unpleasant drinking water and produce staining of household appliances and clothing. The OxiMax Iron, Arsenic & Manganese Removal Systems offer the following advantages for achieving compliance with these contaminants:

- ▶ Much higher filtration rates as compared to competing products in the market, resulting in significantly smaller systems and footprint
- ▶ Smaller systems and smaller footprints save you money on building size and real estate
- ▶ Low capital costs compared to alternatives
- ▶ More reliable and efficient removal of iron, manganese, and arsenic than conventional approaches using other medias
- ▶ Superior handling properties, stability, and NSF 61 certification
- ▶ Custom designed with options to effectively treat your water parameters
- ▶ Enhanced kinetics that allow short contact times
- ▶ Long life typically over 10 years before replacement
- ▶ Performance over wide range of incoming water quality
- ▶ Disinfection of water.



A 150 ltr/ hr Domestic Iron Removal System



Role of Sodium Hypochlorite (NaOCl)

Catalytic surface has to be maintained clean so that ions in water could come in contact with it. Sodium hypochlorite is injected to prevent bacteria growth and blinding with slime of catalytic surface. Hence additional disinfecting the water while removing iron, arsenic or manganese. We use our own electrochlorination systems to produce NaOCl on-site.

HES Water Engineers (India) Pvt. Ltd.

Q: How does the system remove iron contaminants from the water?

A: Through mechanisms of oxidation and coprecipitation, these contaminants are efficiently removed in the OxiMax Iron, Arsenic & Manganese Removal media beds.

Q: Is Sodium Hypochlorite needed for the system and does the media need replacement?

A: A low Hypochlorite dose is recommended for optimal performance of the OxiMax Iron, Arsenic & Manganese Removal systems. It enhances the removal process, improves longevity, and keeps the surface of the media oxidized to prevent buildup of solids. An additional advantage is disinfection of the treated water. Media life is typically 10 years before replacement. We use our own electrochlorination systems to produce Sodium Hypochlorite on-site using small amount of NaCl (Salt).

Q: How do I determine the best way to achieve my treatment goals for my particular site?

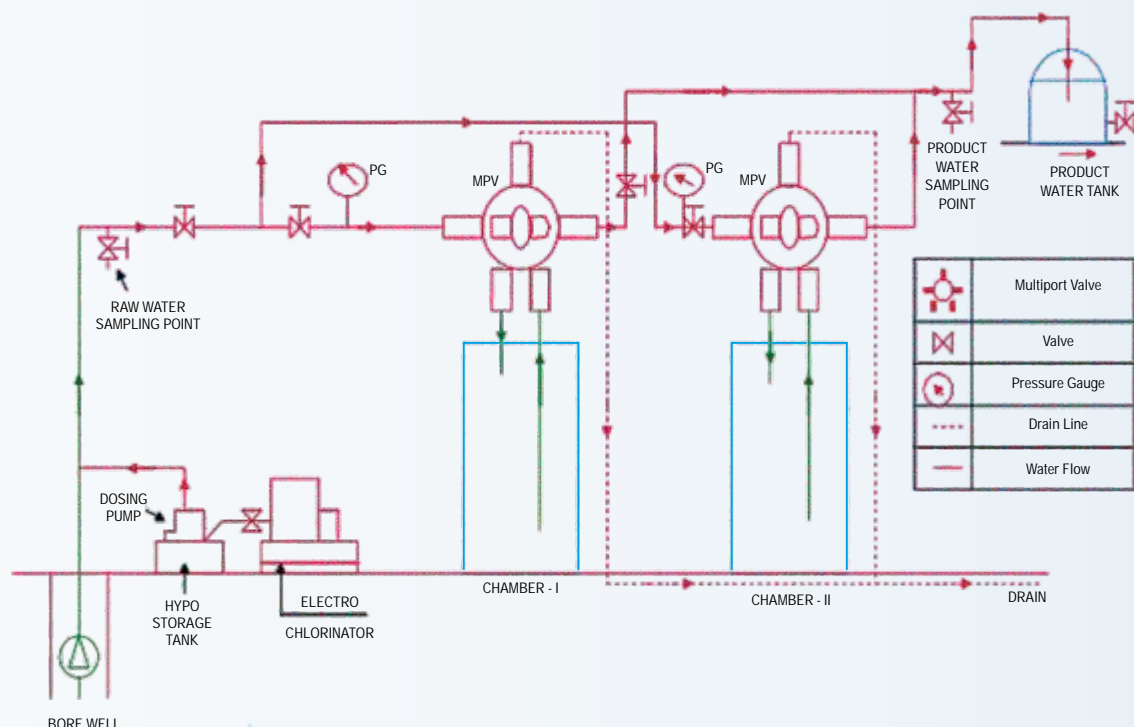
A: Begin first by obtaining a complete site specific water profile from a qualified lab. This information can then be submitted to the OxiMax technical support to discuss your application, equipment sizing and costs.

Q: What experience has HES Water Engineers (India) had with iron, Arsenic and manganese removal?

A: HES Water Engineers (India) has implemented over 100 full scale OxiMax Iron, Arsenic & Manganese Removal systems for Public Water Systems and multiple industrial and remediation project installations.



A Typical drawing of an OxiMax Iron, Arsenic and Manganese Removal System on Power Pump Unit



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