



# IMR-Series Specialty Media

## Iron and Manganese Removal

Rain Bird IMR-Series Specialty Media is a revolutionary silica sand based filtration media designed for the removal of iron and manganese without the use of potassium permanganate. The unique micro porous structure of the IMR-Series efficiently removes dissolved iron to as low as 0.005 ppm and manganese to 0.001 ppm. After initial activation, the IMR-Series acts as an oxidation catalyst with immediate oxidation and filtration of the insoluble precipitates. The media has been used extensively in a wide variety of applications for over 30 years. The IMR-Series has been tested and certified by the Water Quality Association in accordance with NSF/ANSI 61.

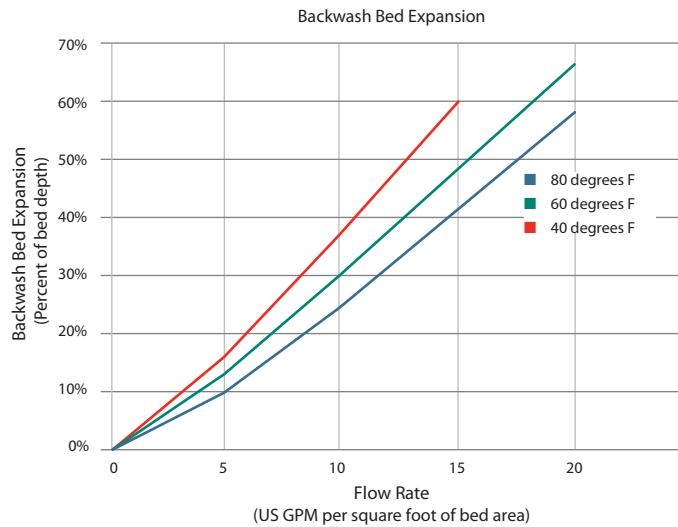
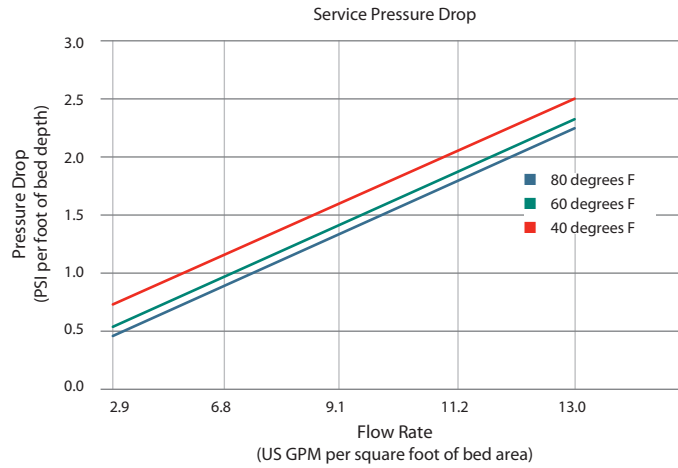


### Advantages

- Eliminates Potassium Permanganate. Operates with continuous injection of sodium hypochlorite at low residual levels (0.1 to 0.3 ppm).
- Wide pH range. Stable and satisfactory performance at pH 5.8 to 8.6.
- High Flow Rates. The IMR-Series can operate at linear filtration velocities up to twice that of conventional media with a corresponding reduction in capital equipment costs.
- Higher Operating Temperatures. Maximum operating temperature of 113° F (45° C).
- Long Life. The IMR-Series is not consumed in the process, providing considerable advantages over other processes or media.
- Regeneration Not Required. After initial activation, only sodium hypochlorite feed is required.
- System Compatibility. Physical properties are similar to that of competitive media, allowing conversion to the IMR-Series without major hardware modifications.
- Arsenic Removal. The IMR-Series has been shown to be effective in the removal of arsenic associated with iron-containing influent. If necessary, ferric chloride can be introduced to treat waters with low influent iron levels or to enhance removal when treating waters with high levels of arsenic.

Rain Bird IMR-Series Specialty Media Specifications			
Physical Properties		Operating Conditions	
<b>Color</b>	Brown to black	<b>pH range</b>	5.8 - 8.6
<b>Bulk Density</b>	92.0 lbs./cu. ft.	<b>Max. Water Temp.</b>	113° F (45° C)
<b>Specific Gravity</b>	2.7	<b>Minimum Bed depth</b>	24 inches (600 mm)
<b>Effective size</b>	0.48	<b>Freeboard</b>	40% minimum
<b>Uniformity coefficient</b>	<1.8	<b>Service Flow Rate</b>	2 - 12 gpm per sq. ft.
<b>Mesh size</b>	20 - 45	<b>Backwash Flow Rate</b>	10 - 20 gpm per sq. ft.
<b>Annual Attrition</b>	1-5%	<b>Backwash Expansion</b>	15 - 50%

## Rain Bird IMR-Series Engineering (Hydraulic) Data



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