

# MANDIOX / AS-FE-MN FILTRATION SYSTEMS

MANDIOX / AS-FE-MN filtration systems are designed to effectively remove iron and manganese from water using oxidation and filtration methods. This process is facilitated by specially activated filtration media, such as greensand and BIRM, which are optimized for iron and manganese removal.

By eliminating these elements, the system prevents the deterioration of facility components and water contamination caused by the proliferation of iron bacteria. Additionally, it mitigates issues such as the narrowing of water pipes, staining of laundry, clothing, and porcelain surfaces, as well as the discoloration and turbidity resulting from iron and manganese presence.

Iron and manganese particles pass through a specialized filtration bed, where they undergo oxidation and precipitation within Automatic Iron-Manganese Filters. The precipitated minerals are then efficiently removed through an automatic backwash process, ensuring consistent filtration performance.

The automation of these filtration systems is typically managed through Clack, RUNXIN, and similar advanced automation valves, while PLC-controlled electrical systems serve as an alternative for high-flow applications.

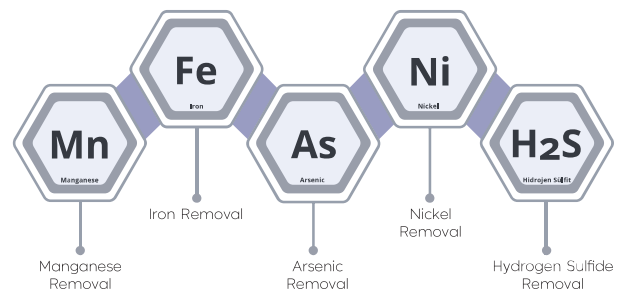


**Chemical Analysis (Average)**

MnO <sub>2</sub> mass % 78	SiO <sub>2</sub> mass % 15	Al <sub>2</sub> O <sub>3</sub> mass % 2	Fe <sub>2</sub> O <sub>3</sub> mass % 1,5	CaO mass % 1
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**Physical Characteristics (Average)**

Specific Weight g/cm <sup>3</sup> 4.4	Bulk Density kg/lt 2,25	Particle Shape Irregular	Particle Size 0.5 - 1.6 mm	Colour Dark Grey
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**STANDARD FEATURES**

- FRP or painted carbon steel body not affected by the water
- Full automatic automation system
- Suitable for use in model
- High quality mineral
- Minimal maintenance without human intervention
- Low energy and operating costs
- 10 bar Tank test pressure
- 2-7 bar operating range
- Max 50 °C operating temperature

**MANDIOX / AS-FE-MN FILTER SYSTEMS**

Stock Code	Tank	Filtration Speed	Media Material		Connection Options
		10 m/h	Mandiox (kg)	Quartz (kg)	
0-DEM-I0075	13x54	0.87	70	15	1" - 1 1/4"
0-DEM-I0100	14x65	1	90	15	1" - 1 1/4" - 1 1/2" - 2"
0-DEM-I0150	16x65	1.3	130	20	1" - 1 1/4" - 1 1/2" - 2"
0-DEM-I0200	18x65	1.65	160	25	1" - 1 1/4" - 1 1/2" - 2"
0-DEM-I0250	21x62	2.25	200	50	1" - 1 1/4" - 1 1/2" - 2"
0-DEM-I0300	24x72	3	250	100	1 1/2" - 2"
0-DEM-I0500	30x72	4.6	500	150	1 1/2" - 2"
0-DEM-I0750	36x72	6.6	700	250	2"
0-DEM-I0900	42x72	9	950	300	2"
0-DEM-I1200	48x72	11.7	1300	500	2"



\*Clack, Runxin and equivalent Valves can be used in the above systems.

**SURFACE PIPELINED**

**MANDIOX / AS-FE-MN FILTER SYSTEMS WITH FRP TANK**

Stock Code	Tank	Connection Diameter Dn-FIns-Srv-Dre	Filtration Speed	Media Material	
			10 m/h	Mandiox (kg)	Quartz (kg)
0-DEM-YIP-500	30x72	50-50	4.6	500	150
0-DEM-YIP-750	36x72	50-50	6.75	700	250
0-DEM-YIP-1000	42x72	65-65	9	950	300
0-DEM-YIP-1200	48x72	65-65	11.8	1300	500
0-DEM-YIP-1600	63x86	80-80	20	2200	800



**EPOXY PAINTED ST-37**

**MANDIOX / AS-FE-MN FILTER SYSTEMS WITH TANK**

Stock Code	Tank	Connection Diameter Dn-FIns-Srv-Dre	Filtration Speed	Media Material	
			20 m/h	Mandiox (kg)	Quartz (kg)
0-DEM-YI-1215	1200 x 2790	65-65	18	1350	500
0-DEM-YI-1615	1600 x 3020	80-80	20	2100	800
0-DEM-YI-2015	2000 x 3250	100-100	32	3300	500
0-DEM-YI-2415	2400 x 3400	125-125	45	4750	700

