

Biostat - First in Water Treatment Solutions

Equipment Selection

System Model	Max Flow-L/min	TIRM Media Load-kg
BS300TRIP	50	220
BS375TRIP	75	340
BS430TRIP	100	450
BS530TRIP	150	700
BS600TRIP	200	800
BS800TRIP	300	1600
BS900TRIP	400	2800
BS1000TRIP	500	3500
BS1000QUAD	600	4600
BS1200QUAD	700	6700
BS1400QUAD	1000	9000

Chart provides guidelines only. Contact your dealer for the correct size equipment to suit your local conditions.

Benefits of a T.I.R.M. System:

- Complete removal of iron and manganese
- Effective for removing arsenic
- Can produce potable water supplies
- Excellent filtration media
- Operates in a wide range of pH
- High operating temperature
- High flow rates
- Long service life
- Low maintenance
- No biological fouling of media



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Biostat Engineering

Contact your local distributor:

T.I.R.M.

IRON REMOVAL PLANT

A Complete System
for the Removal of Iron,
Manganese & Arsenic in
Raw Water Supplies

Industrial – Mining – Agriculture - Domestic

TIRM Plants are capable of a 100% reduction of iron, manganese and arsenic from raw water. Our plant is a fully automated, inline high pressure system. This includes non corrosive vessels, high quality valves and electrical controls. The complete plant can be skid mounted for easy installation.



The TIRM plants are equipped with high quality valves for flow and backwash control.



TIRM plants are configured to suit our customer's requirements. Bunded tanks and dosing pumps for chlorine injection or other chemicals are available.

Part of the TIRM system is a revolutionary silica based media coated in a special formula and resin to preserve the underlay.

The microporous structure of the media allows efficient removal of dissolved iron and manganese by acting as an oxidation catalyst. Immediate oxidation of iron and manganese in the water for treatment occurs on contact with the media.

The media requires a simple activation process and continuous injection of a small amount of sodium hypochlorite

The media retains the oxidized iron and manganese until it is backwashed from the media by the reverse flow of treated water.



Iron and manganese removal media supplied in 20kg and 1000kg bulk bags.

Guaranteed 100% to remove iron and manganese from raw water supplies.

Media Operating Conditions

pH range	5.8 – 8.6
Max water temp	45°C
Minimum bed depth	600mm
Free-board min	40% of media depth
Service flow rate	1 – 30 m ³ /m ² /per hr
Backwash flow rate	min 700mm vert/vel
Backwash bed expansion	15 – 50%

Media Physical Properties

Colour	Brown - Black
Bulk density	20 kg / 0.0135 m ³
Specific gravity	2.5 – 2.65
Effective size	0.45 – 0.50mm
Uniformity coefficient	1.4 – 1.7
Mesh size	10 – 28
Annual media attrition	1 – 5% <small>(dependent on conditions)</small>

NSF Approved product

Pressure Vessels

Colour	Green (others optional)
Material	FRB
Opening	Top, bottom and side
Pressure	Std 800kpa opt. up to 2000kpa
Manufacture	Australian Made
Standard	Australian Standards

