

# **INDION®** New Generation

# Iron Removal Filter (NGIRF)

INDION New Generation Iron Removal Filter (NGIRF) removes dissolved iron present in feed water. Iron is present in ground water as ferrous bi-carbonate. Such water is clear when drawn & turn turbid on contact with air. The filter is provided with a granular iron removal media which removes iron by catalytic action. Feed water containing excessive iron, pretreatment in an aeration tank fitted with spray nozzles is recommended.

We offer a wide range of units to treat flow rates up to 30 m<sup>3</sup>/h. Treated water contains less than 0.3 ppm of iron as Fe.

#### **Features**

- No chemical is required for oxidation of iron. Iron adsorbed on the media is easily removed by backwashing the unit which is carried out by reversal of flow
- Units are free standing; pre-assembled and tested before shipment
- The pressure vessel is of fibre reinforced plastic (FRP) and pipes are of poly vinyl chloride (PVC).
   The entire equipment is corrosion resistant
- The filter is fitted with a multi-port plastic valve operated by a hand lever for ease of operation

### **Applications**

- All applications requiring removal of dissolved iron up to 10 mg/l as Fe and in low flow rates
- Drinking water for residential colonies and commercial complexes
- Pretreatment for industrial water treatment plants
- Food processing, beverages and mineral water production



## **Specifications**

- One FRP pressure vessel fitted with plastic internal fittings
- One set of plastic frontal piping, linking multi-port valve/plastic ball valves to FRP vessel
- One complete charge of iron removal filter media
- One multi-port valve with hand operated lever
- Two pressure gauges one each at inlet and outlet
- One rate of flow indicator (optional)

#### **Technical Specification**

| Model                     | NGIRF<br>1 | NGIRF<br>2 | NGIRF<br>5 | NGIRF<br>7 | NGIRF<br>10 | NGIRF<br>12 | NGIRF<br>15 | NGIRF<br>17 | NGIRF<br>20 | NGIRF<br>30 |
|---------------------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Flow rates (m³/h) Maximum | 1.0        | 2.0        | 5.0        | 7.0        | 10.0        | 12.0        | 15.0        | 17.0        | 20.0        | 30.0        |
| Working Pressure (Kg/cm²) |            |            |            |            |             |             |             |             |             |             |
| Minimum                   | 2          | 2          | 2          | 2          | 2           | 2           | 2           | 2           | 2           | 2           |
| Maximum                   | 3.5        | 3.5        | 3.5        | 3.5        | 3.5         | 3.5         | 3.5         | 3.5         | 3.5         | 3.5         |
| Inlet (mm)                | 32         | 32         | 32         | 32         | 50          | 50          | 50          | 50          | 50          | 90          |
| Outlet (mm)               | 32         | 32         | 32         | 32         | 50          | 50          | 50          | 50          | 50          | 90          |
| Drain (mm)                | 32         | 32         | 32         | 32         | 50          | 50          | 50          | 50          | 50          | 90          |
| Vessel Dia (mm)           | 335        | 400        | 610        | 770        | 927         | 1074        | 1074        | 1074        | 1074        | 1226        |
| Vessel Height (mm)        | 1388       | 1671       | 2163       | 2336       | 2281        | 2292        | 2292        | 2292        | 2292        | 2470        |

Note: Iron Removal Filter requires to be backwashed with iron free water whenever the pressure drops across the unit or exceeds the set limit.

Iron removal media may require replacement whenever its capacity for removal of iron is lost.

Manually operated NGIRF is fitted with a multi port valve.

Automation is carried out using programmable logic controller (PLC) that energies a set of solenoid valves which in turn operates the butterfly control valves located on the unit.

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional/branch offices for current product specifications.

**INDION** is the registered trademark of Ion Exchange (India) Ltd.

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