Water Treatment Cartridge Technology

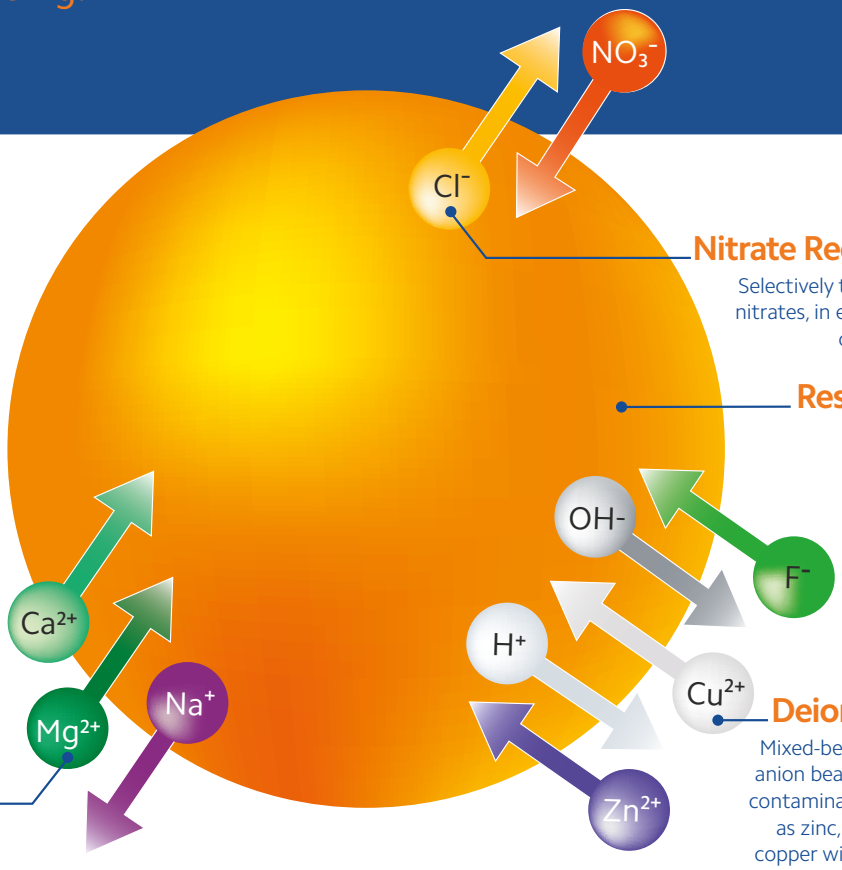
The control of specific dissolved contaminants is essential in a range of applications, from manufacturing make-up water to point of use. Fileder has a variety of technologies which together protect processes, equipment and improve personal wellbeing.

Ion Exchange Technology

There are two primary methods of water treatment, in which resin beads are employed to achieve ion exchange and ultimately, purified water.

In the first, resin beads will exchange either positive ions (cations) or negative ions (anions) to achieve purified water, as illustrated by softening or nitrate reduction.

In contrast, mixed-bed resin will remove both positive and negatively charged ions in exchange for water forming molecules, as in the example of deionisation.



Water Treatment Solutions

Softening Resin has been developed to reduce deposit-forming minerals, such as calcium and magnesium, protecting varied equipment including steam ovens, commercial boilers and reverse osmosis systems. Deionisation (DI) is the process typically employed as the final polishing stage in a water treatment system. DI resin reduces dissolved ions, thus creating a source of pure deionised water suitable for pharmaceutical, printed circuit board and other critical applications. Heavy Metals can have harmful effects on health as well as interfering with sensitive manufacturing processes. Heavy metal reduction resin specifically targets these contaminants, effectively reducing levels to meet drinking water standards. Nitrate Removal is essential in rural or agricultural areas, and considered a serious health problem for infants and the elderly. The selective anion resin reduces nitrate levels by exchanging them for harmless chloride ions, meeting drinking water standards. Iron Reduction can be applied to drinking water applications. The proprietary media used specifically targets dissolved iron to improve taste and prevent orange-brown stains in sinks, toilets and other plumbing fixtures. Scale Inhibiting crystals are an alternative solution to ion-exchange treatment, preventing hardness forming ions from precipitating and the build-up of deposits on sanitary ware, food service equipment and drink vending machines.

Fileder sells over

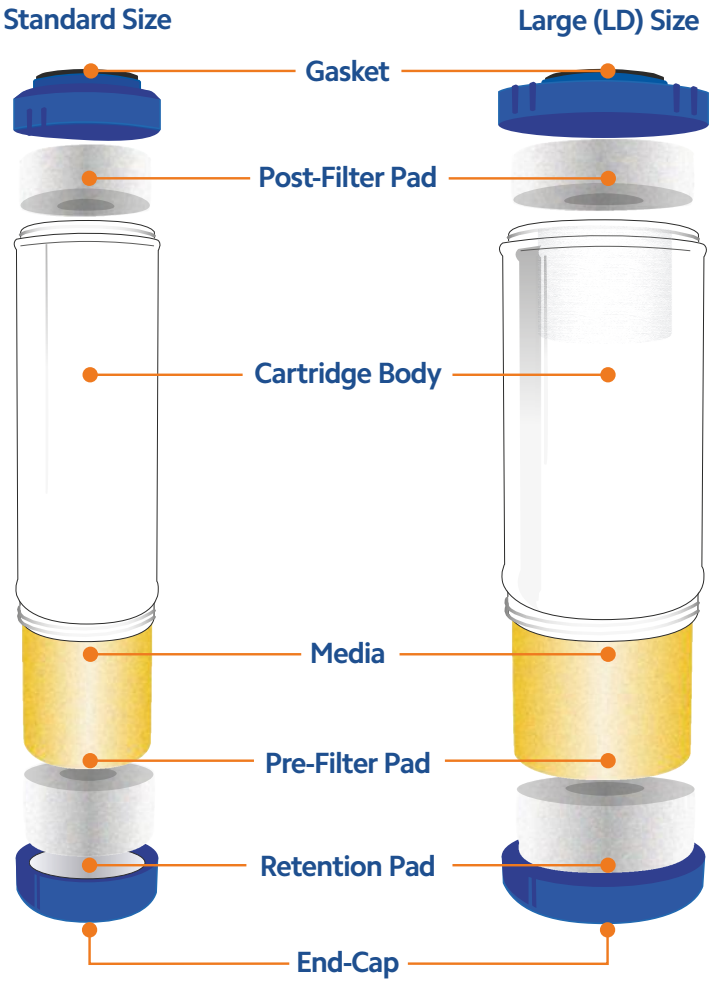
1,000 tons of resin per annum

capable of treating more than

1 billion litres of water.

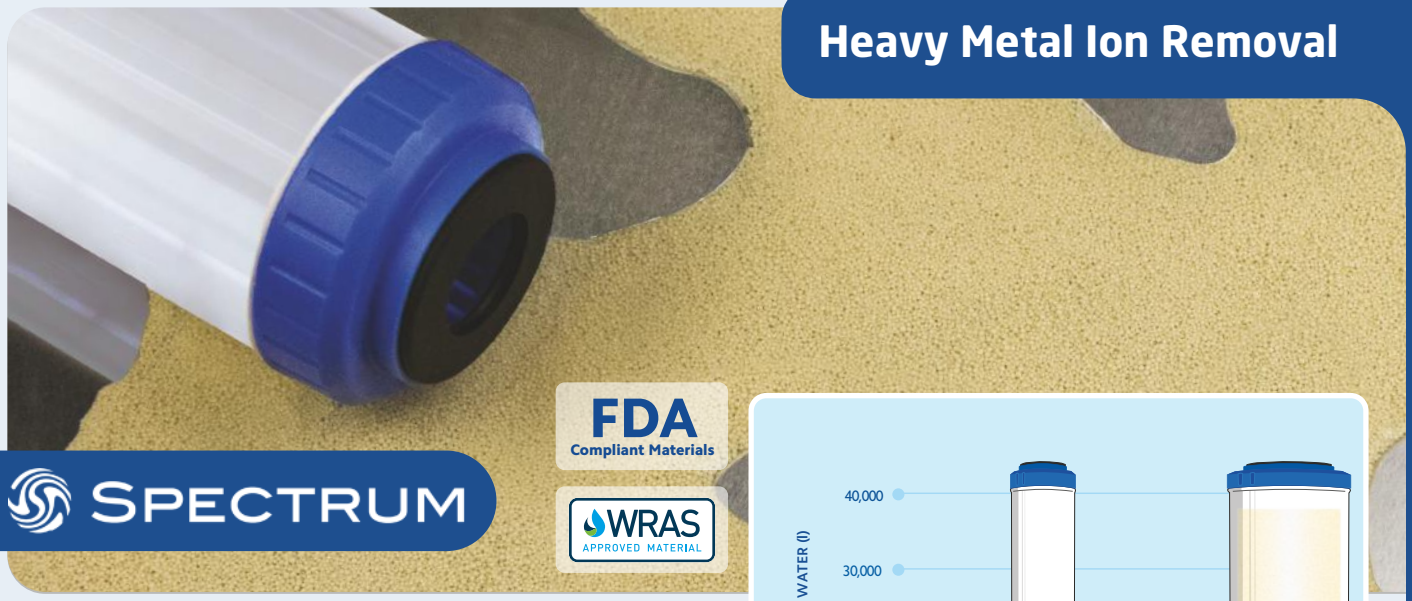
SPECTRUM Resin Cartridge Construction

The range of SPECTRUM water treatment cartridges use a specially designed shell, which both integrates the necessary pre-filtration and maximises fluid distribution through the resin bed by using longitudinal flow to increase contact time.



Flexible Configurations

Designed predominantly to be used within plastic filter housings, water treatment cartridges can be combined with SPECTRUM EFHS housing systems to provide a comprehensive solution to varying water challenges. Options range from single to triple housing systems and size options from 10" regular to 20"LD. When using colour change SRDI-IND cartridges, SPECTRUM clear plastic housings (EFH-SC) should be used.



SPECTRUM

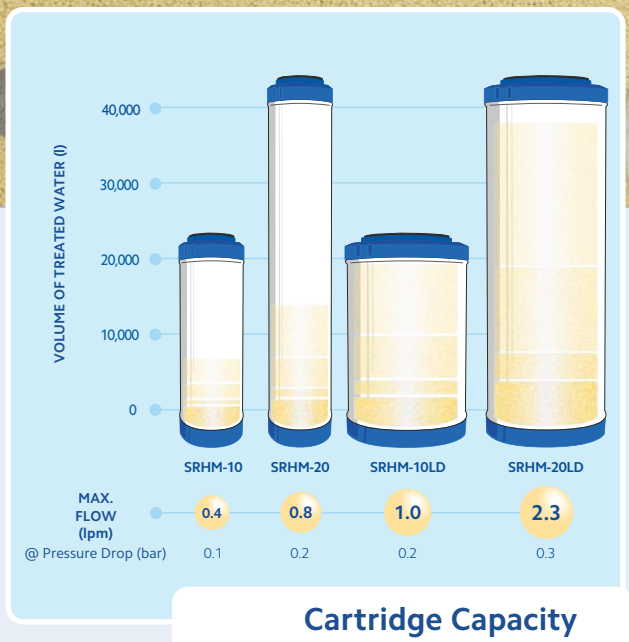
FDA Compliant Materials

WRAS APPROVED MATERIAL

Ion-X Heavy Metal Reduction

SRHM

Delivering excellent selectivity of heavy metals including zinc, mercury and copper from potable water supplies, the SHRM also provides water softening properties without the sodium dosing usually found with exclusive softening cartridges. The SRHM can be combined with other filtration and treatment products for a comprehensive solution.



Key Features

- Simple and proficient reduction of heavy metals
- Reduces toxic and alkaline earth metals
- For use in drinking water applications
- Media is a WRAS Approved Material

Typical Applications

- Pharmaceutical make-up water
- Aquatics

Configurations

Length (")

10	20

Diameter

Regular	Large = LD

Media Type

Weak Acid Cation Macroporous Type (H^+Form)

Cartridge Capacity

Heavy Metals (mg/l)	Volume of Treated Water (l)			
Cartridge Length	10	20	10LD	20LD
10	6,800	14,000	19,600	38,000
25	3,400	7,000	9,800	19,000
50	1,360	2,800	3,920	7,600
75	680	1,400	1,960	3,800

Specification

Operating Temperature Range
4-45°C

Max. Operating Pressure
5.5 bar

Max. Operating Pressure Differential
1.0 bar

Part Number

Code	Length
SRHM	10
	20
	10LD
	20LD

e.g. SRHM-10