

Water Treatment Devices

Device	Primary Use	Limitations
Eddy Electronic Descaler	<p>Inhibits limescale formation</p> <p>Prevents scale deposits in pipes, equipment</p> <p>Improves cleaning action of soaps, detergent</p>	Does not chemically soften water but does provide broadly similar benefits with no ongoing maintenance
Carbon Filter	Removes chlorine, some organic chemicals, resin, general taste and odor problems	Does not remove nitrate, bacteria, or metals. Periodic replacement of activated charcoal required
Mechanical Filter	Removes sand, soil, and other causes of turbidity	Requires regular cartridge replacement or backwashing (depending on type) to maintain effectiveness
Water Softener	<p>Replaces water hardness minerals (calcium, magnesium) with sodium</p> <p>Improves cleaning action of soaps, detergent</p> <p>Prevents scale deposits in pipes, equipment</p>	<p>Removes calcium and magnesium, replacing with sodium (consult physician if sodium in diet is a health concern)</p> <p>Softened water can be more corrosive than unsoftened water</p> <p>Periodic backwashing and regeneration required</p>
Iron Filter	<p>Removes iron and manganese that can cause staining of clothes and plumbing fixtures</p> <p>Prevents odour caused by iron, manganese</p>	Periodic backwashing, addition of potassium permanganate required (frequency dependent on water usage, iron content)

Neutralizer	Treats corrosive or acidic water	May increase sodium or water hardness
Distillation Units	Removes most impurities including minerals and organic chemicals from drinking water.	<p>Distillation takes time and can be expensive. Storage space is needed for treated water.</p> <p>Distilled water has a flat or bland taste.</p> <p>Hard water increases maintenance of distiller.</p>
Reverse Osmosis	Removes most dissolved and suspended impurities from water.	<p>Reverse osmosis wastes up to 50% of water. Process requires time and storage of treated water.</p> <p>Hard water clogs membrane.</p> <p>Carbon and mechanical filters may be required to pre-treat water.</p>