



**Salt-Free Water Descaler System  
Information Sheet**

## Salt-Free Water Descaler System

The ultimate eco-friendly solution for whole-house water treatment. This innovative system uses advanced catalytic technology to prevent and reduce limescale buildup, boost appliance efficiency, and protect your plumbing — all without salt, chemicals, or electricity.

### Key Features

- **Advanced Catalytic Technology** Utilizes a special Fluid Dynamics catalytic alloy made from semi-precious metals. As water passes through, natural conductivity generates a micro-electric field that transforms calcium and magnesium ions into tiny, non-adherent aragonite crystals. Retains beneficial minerals in your water (unlike traditional salt-based softeners) while effectively preventing scale.
- **Whole-House Protection** Safeguards water heaters, pipes, boilers, washing machines, showers, fountains, and more. Handles water mains up to 3 km long with a maximum flow rate of 4 m<sup>3</sup>/h.
- **Eco-Friendly & Sustainable** No electricity, salt, or chemicals required — zero waste and no environmental impact. Lowers energy use, extends appliance life, and reduces your carbon footprint.
- **Durable & Maintenance-Free** Constructed from corrosion-resistant materials with an expected lifespan of up to 15 years. The internal alloy releases electrons continuously for up to 10 years — no disassembly or servicing needed.

### How It Works

Limescale occurs when hard water is heated, causing calcium carbonate to crystallize and stick to surfaces like pipes and heating elements. This descaler prevents and reverses that process:

1. Converts calcium ions into insoluble, non-adherent aragonite crystals.
2. Flushes the aragonite crystals through the system, preventing new scale buildup.
3. Gradually dissolves existing limescale by increasing water's natural solubility.
4. This product is not a filter and will not remove any suspended particles in the water.

**Important Note** on Existing Scale As treated (softened) water flows through previously calcified pipes, fixtures, and components, it can loosen old buildup over

time. This natural descaling process helps restore efficiency but may initially release sediment or dislodged particles into the system.

**Note on Water Quality** — The system functions up to 2000  $\mu\text{S}/\text{cm}$  conductivity (reflecting total dissolved ions). A upper hardness limit is around 500 ppm as  $\text{CaCO}_3$  (based on typical natural water relationships between conductivity, TDS, and hardness).

## Installation

- Simple & Flexible Install horizontally or vertically using standard PVC glue or threaded fittings. Place it on the main water supply line after any pre-filtration. No wiring, bonding, or special tools needed — any competent pipe fitter can do it. Recommended size:  $\frac{3}{4}$ " (22 mm) unit for most households.
- Recommended Pre-Filtration For optimal performance and to protect the descaler from larger particles or sediment in the incoming water, it is highly recommended to install a 100–150 micron pre-filter (such as a sediment filter) immediately before the descaler unit.
- Portable & Convenient Add isolation valves on both sides for easy removal and reinstallation (e.g., when moving house).

## Maximizing Effectiveness During Installation

To achieve the best possible results, especially in homes with long-standing hard water issues:

- Thoroughly clean out the geyser (water heater) to remove accumulated sediment and scale.
- Consider replacing the heating element at the same time, as old, heavily scaled elements may not perform optimally even after descaling begins.

## Applications

- Boilers, hot water systems, and heating elements
- Power and electric showers
- Washing machines and dishwashers
- Fountains and decorative water features

## Warranty

5-year warranty, with performance up to 15 years depending on water quality and conditions.

## Why Choose This System?

- Reduces energy waste and extends equipment lifespan
- Prevents new limescale and helps dissolve existing deposits
- Completely maintenance-free, cost-effective, and environmentally friendly

This salt-free descaler combines cutting-edge technology with effortless installation and zero ongoing costs — delivering cleaner, scale-free water throughout your home for years to come.