# 

114 electrolytic scale reducer









**Product Code** Size

#### Connections

114-9003 15mm compression ends for use with copper tube 114-9005 22mm

compression ends for use with copper tube Electrolytic Scale Reducer

The Altecnic Dirtmag IQ electrolytic scale reducer is not a water softener but induces coagulation whilst the water hardness remains unchanged.

It works in the same way as a small battery where the copper body (cathode) and internal zinc (anode) are connected via mains water (electrolyte) to alter the structure of the hardness salts.

As charged zinc ions are emitted from the anode they form a nucleation site for colloidal particles (such as hardness salts) to group around, rather than clinging to heat exchangers or pipe-work.

Limescale deposits are more common where heat is generated and can have lasting damaging effects on the efficiency and life of the boiler. The Dirtmag IQ electrolytic scale reducer benefits a range of appliances including kettles, taps, showers and boilers.

Note: Water Utilities cannot be held responsible for the quality of water passed from this unit.

# Why fit an electrolytic scale reducer?

Part L of schedule 1 of the Building Regulations (England & Wales) is concerned with the conservation of fuel and power in buildings.

For dwellings, the regulations are supported by approved documents L1A (new dwellings) and L1B (existing dwellings).

These documents give minimum provisions for boiler efficiency, system circulation, hot water storage, system preparation and commissioning of gas-fired, oil-fired and solid fuel systems together with electric wet central heating systems.

They state "Where the mains water hardness exceeds 200ppm, provision should be made to treat the feed water to water heaters and the hot water circuit of combination boilers to reduce the rate of accumulation of limescale and the consequent reduction in energy efficiency."

Therefore fitting an electrolytic scale reducer fulfils compliance with the regulations for both new and existing dwellings.

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#### How to fit you Electrolytic Scale Reducer

Locate the stop-cock to the incoming mains and close the valve. Check it is closed by attempting to run a cold tap.

The unit may be fitted vertically or horizontally and is not directional. Choose a straight pipe run that's long enough to accommodate the unit, after the stop-cock and before any branches as the product gives whole house protection.

Ensure the unit is installed so as to be readily accessible for examination, test, maintenance or replacement.

An approved single check valve or other, no less effective back-flow prevention device shall be fitted at the point of connection between the supply and the unit.

Cut the pipe with a Pipe Cutter to ensure square ends, even if you first need to break into the pipe run using a hack-saw. Ensure the pipe is free from score marks.

Be ready with a cloth and bowl to collect any back flow.

The body length (excluding fittings) is 175mm for the 15mm and 180mm for the 22mm and the distance between the pipe stops is 155mm for the 15mm and 150mm for the 22mm.

Place the Electrolytic Scale Reducer into the gap and tighten the 15mm compression fittings with a 24mm spanner and the 22mm with a 32mm spanner.

Ensure that the joints are firm.

This product does not require earth bonding continuity.

Open the stop-cock and check for leaks.

# Serviceable Life

This electrolytic scale reducer has a serviceable life of between two and ten years (subject to local water hardness) after which time the anode will cease to function and the water conditioning effect will subside.

Tenacious scale will begin to form on the kettle element and shower head again at which time the electrolytic scale reducer should be replaced with a new unit.

# **Technical Specification**

Max. working pressure at 20°C:	10 bar
Cold feed operating temperature:	2 to 40°C
Designed for equivalent free flow of 15mm and 22mm dia pipe	
Compression ends to: for use with 15mm or 22mm copper tube	BS EN 1254-2
Made in Great Britain	

