



algarid has helped many clients improve water purity, clarity, softness and quality.

algarid has lowered client costs for water contamination, maintenance and chemical treatment and also extended machinery and equipment life.

algarid protects pipe-work, valves, filters and fittings on water supply systems by inhibiting scaling, slime and algae growth.

algarid - its history.

The idea of magnetic water treatment is not new as the first patent was taken out in 1890.

However, it was not until the 1960's that a Melbourne engineer Bob Rigby found magnetic water treatment also had dramatic effects on algae, bacteria and fungi, controlling growth and multiplication. After extensive research and testing, a new unit was designed using contemporary techniques and materials and launched on the market as the "Algarid Magnetic Water Stabilizer".

To understand the effect on algae, bacteria and fungi, these microorganisms require food and a balanced diet the same as humans. All living organisms require at least 14 essential nutrients (some biologists claim 23) such as nitrogen, phosphorus, manganese, boron etc. If any of these essential nutrients are missing from their diet, through trace element deficiency they certainly will not multiply and will most likely die. The magnetic field in the Algarid acts as a catalyst combining one or more of the essential nutrients into a molecule, which cannot be assimilated by the organism, effectively creating a trace element deficiency.

The "Algarid Magnetic Water Stabilizer" is easily installed in any water supply with NO running costs NO electricity and NO maintenance required.



algarid

Magnetic Water Stabilizers

TECHNICAL

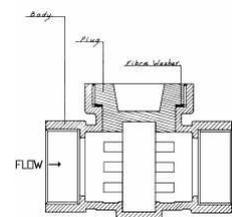
About the Technology

The magnetic technology has been cited in the literature and investigated since the turn of the 19th century, when lodestones or naturally occurring magnetic mineral formations were used to decrease the formation of scale in cooking and laundry applications. Many magnetic water treatment units have been on the market claiming scale reduction since the original patent taken out in 1890 by Englishman William Benedict Ball. However, the availability of high-power, rare-earth element magnets has advanced the magnetic technology to the point where it is more reliable.

The technology uses a magnetic field to alter the reaction between scale-forming ions in hard water. Hard water contains high levels of calcium, magnesium, and other divalent cations. When subjected to heating, the divalent ions form insoluble compounds with anions such as carbonate. These insoluble compounds have a much lower heat transfer capability than heat transfer surfaces such as metal. They are insulators. Thus additional fuel consumption would be required to transfer an equivalent amount of energy.

The general operating principle for the magnetic technology is a result of the physics of interaction between a magnetic field and a moving electric charge, in this case in the form of an ion. When ions pass through the magnetic field, a force is exerted on each ion. The forces on ions of opposite charges are in opposite directions. The redirection of the particles tends to increase the frequency with which ions of opposite charge collide and combine to form a mineral precipitate, or insoluble compound. Since this reaction takes place in a low-temperature region of a heat exchange system, the scale formed is non-adherent. At the prevailing temperature conditions, this form is preferred over the adherent form, which attaches to pipe work and heat exchange surfaces.

This technology can be used as a replacement for most water-softening equipment. Specifically, chemical softening (lime or lime-soda softening), ion exchange, and reverse osmosis (RO), when used for the control of hardness, can be replaced by the non-chemical water conditioning technology. This would include applications both to cooling water treatment and boiler water treatment, in both once-through and recirculating systems.



Specifications

algarid Model	Size	Nominal Flow Rate		Length	Weight	Pressure Rating		Housing
	MM (inch)	LT/SEC	GAL/HR	MM	KG	kPa	PSI	Material
ALG 05	40 (1½")	5	4,000	114	1.5	2068	300	BRONZE
ALGC 05	40 (1½")	5	4,000	114	1.5	2068	300	CHROME
ALG 20	80 (3")	20	16,000	432	41	2068	300	BRONZE
ALG 35	100 (4")	35	28,000	508	67	2068	300	BRONZE
ALG 80	150 (6")	80	64,000	508	141	2068	300	BRONZE

Proudly Manufactured in Australia by:

K-Sol Services Pty Ltd T/A **ALGARID**

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