



Cooling Towers

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

algarid treatment has also proved effective in reducing bacterial counts in cooling towers and evaporative coolers. Tests have demonstrated that on cooling towers fitted with algarid stabilizers have had bacterial counts down to just 3% - 15% of chemically treated towers.

algarid treatment differs from conventional water treatment procedures. Utilizing magnetic water treatment brings about subtle changes in the water chemistry, which reduces the availability of minerals and nutrients for participation in trouble causing reactions and processes.

Algae, bacteria and fungus are all living things, requiring food the same as you and I. They also require a balanced diet. All living things require a list of 14 essential nutrients such as nitrogen, phosphorus, potassium manganese, boron, etc. If any one of these essential nutrients is missing from their diet they will die, and certainly they will not multiply (trace element deficiency). Therefore they do not kill algae and bacteria outright, but starve these microorganisms (including Legionella bacteria) of nutrients that deny them the ability to grow and flourish. The magnetic field in the "Algarid" acts as a catalyst, combining one or more of the essential nutrients into a molecule which cannot then be assimilated by the organism, thus effectively creating the trace element deficiency.

Magnetic water treatment, apart from inhibiting algal and bacterial growth also reduces scaling and promotes sedimentation. 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. The scale formed is non-adherent. At the prevailing temperature conditions, this form is preferred over the adherent form, which attaches to heat exchange surfaces.



algarid

Magnetic Water Stabilizers

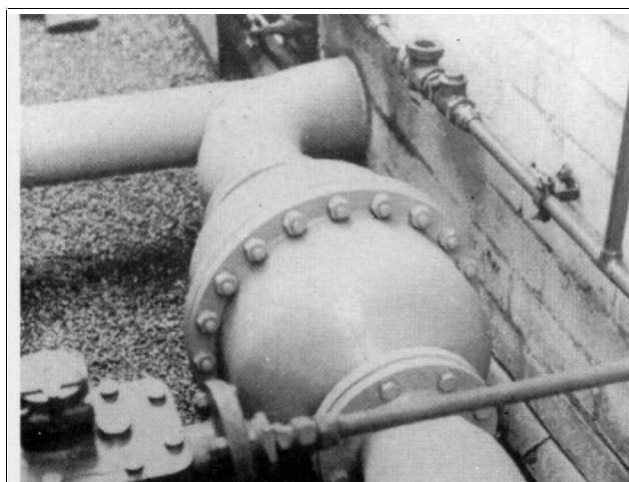
MECHANICAL

algarid magnetic water stabilizers have key applications on boilers, hydronic systems, cooling towers and evaporative coolers. The quality of water circulating through a system has a significant effect on the overall system efficiency, degree of maintenance required and the useful life of the components.

The objectives of water treatment regimes are:

1. To control the growth of microbiological organisms to minimize general fouling
2. To inhibit the formation of scale and corrosion of the system metals.

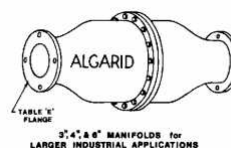
algarid water stabilizers address both these problems.



algarid 150mm unit fitted in the air conditioning condenser circulating system in a multi-story building.

Note also a 40mm unit fitted to the 20mm make up line.

As a magnetic field is a natural force and there is no measurable residue in the water treated, there is no toxic effect. All bleed off water is non-toxic and can be re-used for gray water and horticultural purposes. From testing it is clear that correct bleed off from evaporative cooling towers is essential.



algarid water stabilizers are available for larger applications to suit pipe sizes 80mm, 100mm and 150mm allowing treatment of up to 4800litres/min. (Custom units have been built to 300mm pipe size). Constructed from the highest quality bronze with state of the art ceramic magnets, the units are easily installed in either metal or plastic pipelines.

algarid water stabilizers need never be touched while in service providing it is protected against blockages by larger objects. No power or chemicals are required and optimum performance can be expected with a minimum field expectancy of at least 25 years.

Proudly Manufactured in Australia by:

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