

This interested product is an innovation for future purpose

Scale prevent and removal corrosion protection in the cooling water and hot water systems using innovative Sialex®Ring rings without electricity, electromagnetic waves and chemicals

Inspiration

Throughout the period. The use of chemicals to improve the quality of coolant. And hot water to solve the scale problems that occur inside the pipe, and currently is still being used widely. The aftermath of using chemicals Pollute the environment and corrosion in the system. Therefore, if there are innovations that can help solve these problems without using chemicals or any electrical power will be good for the environment and reduce the impact from the use of Chemicals.

Energy Solution Systems Co.,Ltd. would like to be part of the innovation to replace chemicals. To help make the world a more pleasant environment for us and for our children

Concept of innovation

The company has proposed an innovative anti-scale ring. And corrosion Sialex®Ring with research and production from Germany Accepted both in and abroad general characteristics as shown in Figure 1.



Figure 1 Sialex®Ring Device

Sialex®Ring uses basic science principles. That is to say, the nature of an object, whether it is in the form of solid, liquid or gas. within the object, vibrations of specific molecules occur. The vibrations that occur in the natural water are the same. Will cause a structural form of calcium crystal that has a unique shape. When the water has been transferred to heat, the formation of calcium bicarbonate in the form of the solution turns into calcium cabonate. Which is in a solid form and clinging together to form a scale.

Energy Solution Systems Co., Ltd

SialexRing is an anti-scale device. That does not use electrical energy or magnets or electromagnetic field waves. It does not need electronic components make it able to be installed even in the area there is a risk of fire or explosion. Installation is no need to stop the machine system, no water pipe editing and easy to install. The device is designed to last for a long time.

Can be installed with all types of water pipes. Can be used with hot water, cold water or normal temperature water in which the installation location will be the water pipe on the machine inlet as shown in Figure 2



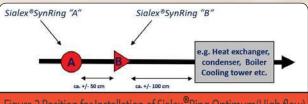


Figure 2 Position for Installation of Sialex®Ring Optimum(High flow)

The ability to increase energy efficiency of innovation

Prevention of scale build-up the condenser and hot water systems increases the efficiency of heat exchangers for machines. Also resulting in reducing electricity usage and fuel power. If considering the problem of scale that occurs in the cooing system. The different scale thickness also affects the different energy usage.

Value of innovation

This innovation can eliminate scale without using electricity of electromagnetic wave High security. Without chemicals using as well as the investment cost and low maintenance cost resulting in worthwhile use. It is good for the environment and users.

Who is this innovation suitable for?

Industrial plants, Office building, Shopping malls, Hospitals, Hotels and various organizations. That has scale and corrosion problems. Sialex®Ring ring can be installed especially for systems that use coolant or hot water such as Chiller, Cooling tower, Heat exchanger, Evaporative condenser etc.

Our concept to develope our product infuture

In the future, we will develope our Sialex*Ring to prevent scaling from sea water, also any water or liquid that contain high calcium and Magnesium.

ENERGY SOLUTION SYSTEMS CO.,LTD

123/119-120 Chalong krung Rd, Lampratue Ladkrabang, Bangkok Thailand 10520 Email: thaneat.m@energysolutions.co.th Tel:+66(0) 2 170 8071-2,+66(0) 96 6325392

