Harsonic® Product Range: different devices

Recreational Marine:
1. Harsonic® for Boat Hull
2. Harsonic® for Propellers
3. Harsonic® for Gazoitanks
4. Harsonic® for Watertanks

Professional Marine & Offshore:
1. Harsonic® for Hull
2. Harsonic® for Propellers
3. Harsonic® for Tanks
4. Harsonic® for Boxcoolers
5. Harsonic® for Pipelines

Industry:
1. Harsonic® for Coolingtowers & Heatexchangers
2. Harsonic® for Industrial Tanks & Filters
3. Harsonic® for Industrial Pipelines

Agriculture & Aquaculture:
1. Harsonic® for Tubes
2. Harsonic® for Tanks

Open Waterstorage:
1. Harsonic® for Open Waterstorage (ponds, open tanks,...)
2. Harsonic® for Jacuzzi

HARSONIC® INDUSTRIAL APPLICATIONS

FOR PERMANENT BIOFILM REMOVAL WITHOUT CHEMICALS
FOR PIPES, TANKS, FILTERS, ...

WWW.BIOFILMFREE.COM    INFO@BIOFILMFREE.COM
+32 475 253 007    BIOFILMFREE
TO CLEAN TANKS, PIPES, FILTERS, ...  

Harasonic® completely cleans tanks, pipes, filters, walls for example in:
- COOLING TOWERS
- HEAT-EXCHANGERS
- MANUFACTURING PROCESSES IN FOOD INDUSTRY, PAPER-FACTORIES, GOLDMINES, ETC...

WITHOUT ANY CHEMICALS but with highly powerful ultrasound devices: Harasonic® devices are more than just ultrasound. They are improved with our own unique HS-technique. This technique is developed by our own engineers and guarantees the good result.

POLLUTANTS IN WATER
Water that is circulated, even in tap water, often contains pollutants that can cause a series of problems such as fouling, limestone formation, corrosion and biological growth.

MICRO-ORGANISMS
Bacteria and other pathogenic micro-organisms are present everywhere in the environment. They can often be found in cooling tower water. When cooling towers contain an open recirculation system, micro-organisms can be spread from air to water. Micro-organisms & bacteria can rapidly multiply when a substrate is present. The perfect substrate for micro-organisms is BIOFILM.

BIOFILM
We take pride that Harasonic® is the undisputed leader in a mechanical system to remove biofilm and prevent all kind of fouling. University studies have proven that Harasonic® gives the most stable result compared with peroxide or/and UV (www.harsonic.com)

As a result of biofilm formation, micro-organisms can attach themselves to surface layers. This biofilm layer allows micro-organisms to no longer be flushed away. Biofilms protect micro-organisms from toxic disinfectants. Water disinfection will be much more difficult when a biofilm is present.

Bacteria need a biofilm to develop, even legionella which develops between 20°C and 50°C. From 60°C on, they die. But when residing in biofilm they can survive up to 70°C. Inside the biofilm, Legionella bacteria are resistant against disinfectants. Workers in cooling towers, persons working in air conditioned rooms and people taking a shower are exposed to Legionella by inhalation, when the systems are not well maintained.

BIOFILM CAUSES A NUMBER OF PROBLEMS, WHICH INCLUDE:
- ATTACHMENT FOR MICRO-ORGANISMS, FOULING, LIMESTONE FORMATION, BIOLOGICAL GROWTH, ...
- CLOGGING OR BLOCKING OF PIPES, FILTERS, ETC, ...
- CORROSION OF THE WALLS: ANAEROBIC BACTERIA FORM SULPHIDE BYPRODUCTS, WHICH ARE CORROSIVE
- AN INSULATION LAYER ON HEAT-EXCHANGE SYSTEMS, CAUSING THEM TO NO LONGER FUNCTION PROPERLY
- OXYGEN DEFICIENCY IN THE SYSTEM
- ORGANIC ACIDS, WHICH CAUSES A DECREASE IN pH

Harasonic® devices have a EMC certificate which proves that Harasonic® devices have no influence on human beings nor on other electronic equipment.