

How To Stop Corrosion, permanently.

Procedure: Identify the type. Understand what causes it. Prevent it.

Identify.

The following are all caused by electrolysis. All causes can be prevented. Permanently.



*Hull less than one year submerged.
Metal dissolved so paint lifts*



*SeaBis System applied. Same hull
after a year submerged*



Outboard leg 3 months immersed



Hull dissolved so paint lifts



*Non-metal hull so propellor takes
stray current corrosion*



Radiator dissolves



Weld electrolysis



Patches of electrolysis

The CAUSE of all these can be prevented, permanently. It is stray current generated by your vessel. That stray current dissolves metal. SeaBis measures that current. The System part identifies the cause then explains how to correct it.

Understand

Corrosion protection commences with understanding: DC is short for Direct Current. DC current termed stray current is generated by batteries and DC supplies. It flows in the same direction permanently. Therefore, it will permanently remove particles of your metal to the Earth (the Earth we stand on), termed marine electrolysis. Sometimes termed stray current. DC is the only cause for electrolysis: [Wikipedia explains](#). So procedure: prevent the stray current that is the only cause of electrolysis with SeaBis Master System.

Do not waste your time and money with the following:

Accelerated corrosion is a new experience.

That DC current dissolve metal by electrolysis. As the metal becomes rougher so its surface area increases. That increases the (stray) current flow. So, increasing corrosion. I have witnessed a 10-day time period from no to extreme corrosion many times. The SeaBis System prevents the CAUSE.

People complain their multi meter or fish or probe or half-cell or blocker does not fix cause:

Electrolysis corrosion is caused by stray current, not voltage. SeaBis measures current as current. Therefore, only SeaBis will assist. Others will in fact create confusion. They all measure the voltage of every vessel within 150 meters when the cause is current.

Can AC or shore power cause corrosion?

Absolutely not. Reason is AC is short for Alternating Current. It reverses direction every half Cycle or Hertz. So, IF it takes off a particle in first half Hertz it will replace it in second half Hertz. So, AC cannot cause marine electrolysis corrosion.

Some will say that AC may contain DC. IF that were so there would be no Back EMF or Counter Motive Force. So, nothing to control the flow of current. Resulting in EVERY AC appliance burning out.

Will more anodes help?

A one-kilogram (2.2 pound) anode produces 0.000001 amp of protective current. Marine electrolysis or stray current starts at 0.001 amp and is commonly 1 amp. I have measured nearly 10 amps. Therefore, you would need at least 1,000 Kilograms anode to make any reduction in marine electrolysis. Much more practical and cheaper to eliminate stray current that is the CAUSE.

Can my corrosion be caused by galvanic (different metals)?

Different metals such as stainless and aluminum, when very close together generate a very low value current. It is in the millionths of an amp. That results in galvanic corrosion. It takes many months for that corrosion to be visible. However, it is accelerated by marine electrolysis. Therefore, the procedure is to prevent electrolysis then prevent galvanic corrosion by adding non-metal between the two or anode.

Prevent the **CAUSE**, permanently

Metal corrosion - **CAUSE** elimination system



Training and diagnostic assistance included

Normal no electrolysis you are absolutely safe

Caution very low current very slight risk

Serious visible corrosion in 6 months

Critical visible corrosion in 3 months

AC only alarm your batteries, electronics and yourself at risk

CAUSE of metal corrosion permanently eliminated using **How To Stop Metal Corrosion**

Assume SeaBis flashes Battery negative (**Bat neg**). Your work is halved because the cause is on battery negative. Not battery positive.

Visual diagnosis is much fastest. Look for any land type equipment. If it has a metal case or base that case may be at **Bat neg**. Therefore, causing stray current.

Look for VHF antenna or any antenna or equipment enclosure that is NOT insulated (not plastic) at its base. If it has a metal case or base that case may be at **Bat neg**.

Commonly there is more than one cause. They are all in parallel. So, disconnect until you get **Normal** (green). Disconnection is commonly at brass strip connecting all DC negative wires together, usually black wires.

When you have **Normal**, touch connect one wire at a time. Label any that cause other than **Normal** "electrolysis".

Replace any that do not cause electrolysis. When all wires are tested, you will have one or more that are known to cause electrolysis.

See what has no power then you know the cause. Check its insulation to hull or engine metal body. See SeaBis Instructions for causes and repairs. If in doubt contact us: Glen Bishop at seabisbg@gmail.com Mobile: Australia 0417 878 773. Address 2/5 Ninth Street, Millicent, South Australia 5280. SeaBis Home page: www.seabis.com.