SHORE POWER CONNECTIONS CAUSE GALVANIC CORROSION

Many vessels these days reside in a marina or yacht club. With the increased use of technologies on our vessels the necessity for mains power connection when the vessel is in the pen. This is great to keep the systems on the vessel functioning but a problem for galvanic currents.

When a vessel is connected to shore power it is also connected to the shore earth grounding system through the earth grounding on the shore power cable. All vessels connected to the power system are interconnected to the shore earth.

The vessel’s submerged metals may either:

- Be more anodic than the copper earth and therefore corrode;
- Be more anodic than another vessel’s submerged metals and therefore corrode

Anodes may dissipate at an accelerated rate leaving the vessel without cathodic protection.

The Electrolysis Blocker halts the flow of the DC galvanic current which causes galvanic corrosion whilst maintaining the AC continuity of the earth grounding conductor in the event of a fault.