

TROUBLESHOOTING CORROSION

WHAT ARE THE SIGNS?

Affects to PropSpeed coating can be indicative of an underlying problem and correct identification can help to get the best performance from your vessel and coating system.

Understanding and identifying the type of corrosion activity on your vessel is essential to provide an effective solution and prevent further damage.

GALVANIC CORROSION

Occurs when two or more dissimilar metals are brought into electrical contact underwater.



SIGNS:

Dealloying or pinking of metal seen as patchy areas.



Copper leaching from bronze, leaving metal brittle and dull sounding when tapped.

ACTION:

Ensure all metals are appropriately connected to an anode. All fittings are of a matched material where possible and isolate metals using a protective coating such as PropSpeed.

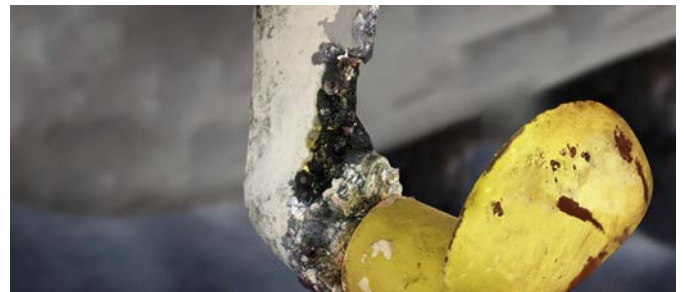
ELECTROLYTIC CORROSION

Stray current induced corrosion due to AC or DC influences – either on board or from the marina environment (if plugged into shore power).



SIGNS:

Propellor pitting seen clearly on PropSpeed coating.



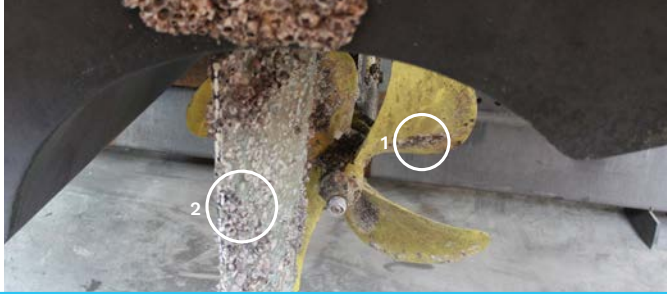
AC stray current causing colour change and paint deflection to metallic surfaces. Can be seen by premature PropSpeed failure, high levels of growth and/or unusual anode wear.

ACTION:

Identify and isolate source of the stray current. Without correct isolation coating failure and metallic loss will continue.

OVERPROTECTION

Occurs when the sacrificial anode creates a current higher than necessary to protect more noble metals. High anode loss is always a sign something is not right.



SIGNS:

¹ Coating is thinning, ² marine growth, ³ excessive anode loss, ⁴ antifoul loss.

PREVENTION:

Seek professional assistance to achieve proper cathodic protection.
 Click here to view anode selection guide.

CAVITATION

Happens when bubbles of air form within a fluid and collapse under high pressure creating small shockwaves that over time punch tiny holes in infrastructure.



SIGNS:

¹ Corrosion underneath coating and localised pitting. ² A similar pattern of coating loss, pitting, mechanical noise and vibration.

ACTION:

Seek professional assistance for balancing propellers.

Propspeed's robust insulating coating system can greatly **reduce the risk of severe corrosion** on your vessel's underwater metals and should be part of an active corrosion management plan.

Visit Marine Protection Systems, the corrosion experts, to learn more about corrosion and correct anode selection to ensure the best efficiencies and performance for your vessel.

