

# Maddox Anode Suitability Guide

## CONFIRMING MADDOX SUITABILITY

Vessel construction: Composite (fibreglass, carbon) & timber

### SUITABILITY GUIDE:



**Maddox Anodes will** only protect harder (more noble) metals like:

- Stainless steel (304, 316, duplex)
- Bronze (Nibral & Naval)
- Copper
- Limited quantity mild steel (timber vessel with Steel shoe / rudder that is well coated)
- Salt and brackish water



**Maddox Anodes will not protect**

- Aluminium hulls, fittings or fixtures
- Gross mild steel structures and hulls
- Will not protect in fresh water

*Maddox Anodes create a more neutral effect around the metals it is protecting, resulting from a lower drive potential. It is essential that the bonding system is in excellent condition to ensure appropriate protection is achieved.*

### BONDING SYSTEM:



Shall have no more than 1ohm resistance between a bonded article and the anode.



Use marine grade-fine strand tinned copper cable (min 6mm<sup>2</sup>, but recommended 10mm<sup>2</sup> to prevent voltage drop).



Connections be using stainless steel lugs with waterproof heatshrink.



Connections maintained & protected with MPS Conductive Grease.



Confirm health of bonding system annually at a minimum.

[See Guide to Bonding](#)

## ANODE COMPATABILITY:

- All Anodes** on the same bonding system must be the same anode material. For example zinc & Maddox linked together will not work, the zinc will be used & the Maddox will not.
- Separate cathodic protection systems are possible to ensure the material is being protected by the correct anode.

### Example:

- Sterndrive - Zinc or aluminium anodes locally
- Stainless Steel - Swimplatform/trim tabs/through hull fittings protected with Maddox Anodes

**ENSURE NO COMMON CONNECTIONS / ELECTRICALLY ISOLATED**



**Hydraulic Thrusters or Thrusters bonded to Cathodic Protection System**

## SIGNS MADDOX IS WORKING:

- White, fluffy material with some small bubbles.
- Some mild marine growth attachment.

## SIGNS MADDOX IS NOT WORKING:



No change, looks new, no bubbles.

**Action** = Check continuity to anode bolts. Check bonding system continuity to anode.



If high resistance: Re-seat anode; clean studs with wire brush, apply MPS Conductive Grease liberally to studs & re-install

**Action** = Improve bonding. Confirm compatibility.



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