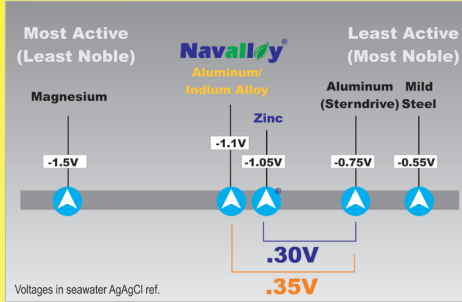


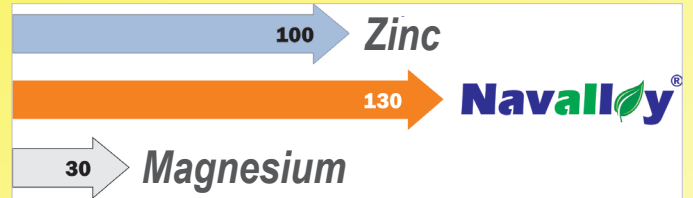
# Why Navalloy® Anodes?

## 1 Better Protection...

Navalloy Aluminum anodes generate a lower voltage (-1.1V) than Zinc (-1.03V) providing increased protection.



## 2 Longer Life...



Navalloy lasts 30-50% longer than Zinc.

## 3 Any Hull...

	Aluminum	Steel	Fibreglass
<b>Navalloy</b>	✓	✓	✓

## 4 All Water Types...

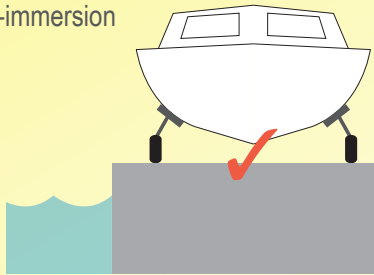
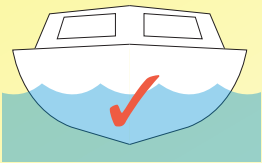
	Salt	Brackish	Fresh
Zinc	✓		
Magnesium			✓
<b>Navalloy</b>	✓	✓	✓



Alloy meets American Boat and Yacht Council requirements for use in all types of water.

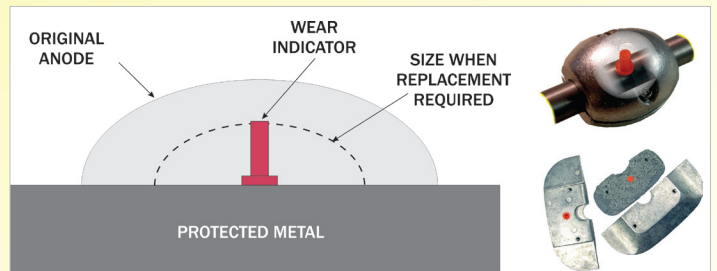
## 5 Any Kind of Use...

- Re-activates after exposure to air
- Works immediately on re-immersion
- No cleaning required



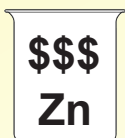
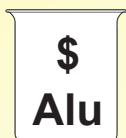
## 6 Red Spot Wear Indicator...

- The patented wear indicator is exclusive to Performance Metal Products - when the Red Spot appears it's time to change!

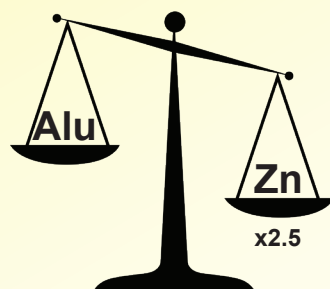


## 7 Lower Cost...

Aluminum anodes are often less expensive than comparable Zinc anodes.



## 8 Lighter...



## 9 Eco-Friendly...



## 10 Attractive Packaging...



# Why **Navalloy**<sup>®</sup> Anodes?

## **1 Better Protection...**

Navalloy anodes work better than Zinc because they generate a lower voltage (-1.1V) than Zinc (-1.03V) providing increased protection. The benefit of the lower voltage is that, when connected to a component, it will reduce the 'protected' component's voltage more than Zinc will.

Navalloy Mil.Spec. MIL-A-24779.

## **2 Longer Life...**

Navalloy anodes work longer than Zinc because they have more capacity for the same overall size:

Capacity per unit weight is:

Zinc	368 Ampere Hours/lb
Navalloy	1150 Ampere Hours/lb

But density is:

Zinc	0.25 lb/cu in
Navalloy	0.10 lb/cu in

Therefore the relative life expressed in Ampere Hours/cu inch is:

Zinc	92
Navalloy	115 (+25%)

Therefore Navalloy anodes provide more than 25% to 30% of life compared with Zinc.

## **3 Any Hull...**

Navalloy anodes can be used on any type of hull material - fibreglass, Aluminum or steel without fear of over protection.

Magnesium anodes can sometimes over protect Aluminum hulls or outrives resulting in rapid corrosion and paint lifting and in some circumstances Zinc does not provide enough protection.

Most outboard and sterndrive manufacturers now install Aluminum anodes as standard because they are safe and offer the best overall protection.

## **4 All Water Types...**

Navalloy anodes will continue to work in any type of water – fresh, brackish or salt water. Zinc will coat over with Zinc hydroxide in freshwater which insulates the anode from the water and stops it from working. Magnesium can overprotect in salt or polluted water.

Navalloy is approved by the ABYC (American Boat and Yacht Council) for use in all types of water and meets all requirements.

## **5 Any Kind of Use...**

Navalloy anodes can be left permanently immersed or can be used on boats that are frequently hauled out of the water (such as trailered boats, boats on lifts or left on the hard over winter). Zinc anodes will coat over if exposed to air and need to be burnished before re-immersion.

## **6 Red Spot Wear Indicator...**

Many Navalloy anodes are fitted with the patented Red Spot Wear Indicator which appears in the surface of the anode when its surface area is no longer big enough to provide full protection. This tells the boat owner clearly when to change anodes.

## **7 Lower Cost...**

Aluminum anodes are often less expensive than comparable Zinc anodes.

## **8 Lighter...**

Navalloy anodes are lighter than Zinc which is 2 ½ times more dense than Aluminum.

Zinc density	0.25 lbs/cu in (6.6gm/cc)
Aluminum density	0.1 lbs/cu in (2.8gm/cc)

## **9 Eco-Friendly...**

Navalloy anodes are 20 times more eco-friendly than Zinc anodes.

In the USA the EPA (Environmental Protection Agency) has identified Zinc anodes as a major cause of pollution marinas and so now recommend the use of Aluminum anodes.

## **10 Attractive Packaging...**

Navalloy anodes are packaged attractively with printed text in four languages and including fitting instructions and hardware and in many cases are available in complete kits for maximum convenience.