

PAYING TOO MUCH FOR ANODES?

Give your vessel a longer life *and save money* with high quality
Zinc and Aluminium Sacrificial Anodes

Sailing Boats
Motor Boats
Outboard Engines
Leisure Crafts
Workboats
Fishing Boats
Pontoons



Standard and special requirements
Hull Anodes
Shaft Anodes
Tank Anodes
Anodes for Cooling Systems
Impressed current and Anti-Fouling systems





ZINC SPECIFICATION OF SACRIFICIAL ANODES

SPECIFICATION CODE US MIL SPEC 18001K

IRON	FE	0.005%
CADMIUM	CD	0.025-0.07
COPPER	CU	0.005MAX
ALUMINIUM	AL	0.10-0.50
LEAD	PB	0.006MAX
OTHERS TOTAL		0.10 MAX
ZINC	ZN	REMAINDER

Capacity: 780 Amp-Hr/Kg

Potential: -1.050 v silver/silver reference cell

This alloy is produced from pure high grade Zinc (99.995% purity) and then alloyed to above specification, it is false economy to purchase zinc anodes which are not correctly formulated, minor variations can have a dramatic effect on the effectiveness of the alloys and their life time.

ALUMINIUM SPECIFICATION OF SACRIFICIAL ANODES

SPECIFICATION CODE US MIL SPEC 24779B

IRON	FE	0.090 MAX
SILICON	SI	0.08-0.20
COPPER	CU	0.004MAX
ZINC	ZN	4.0-6.5
INDIUM	IN	0.014-0.020
TITANIUM	TI	N/A
GALLIUM	GA	N/A
MERCURY	HG	0.001MAX
NICKEL	NI	N/A
OTHERS		0.0250MAX
ALUMINIUM		REMAINDER

Capacity: 2535 Amp-Hr/Kg

Potential: -1.05 v silver/silver reference cell

This alloy is produced from high grade aluminium and then alloyed to above specification, ideally suited for transition from sea to brackish water, or varying seawater temperatures, and salinity.



**Anodes are available in Zinc,
Aluminium and Magnesium.**

**In BOLT ON and WELD ON
Versions**

**This Catalogue shows our
current standard stock.**

**Please ring or email
if you require any others anodes.**

**As a rule of thumb
Zinc is used in Salt water
Aluminium in Brackish water
Magnesium in Fresh water**

PLU 6



WEIGHT		DIMENSIONS	
Gross	1.3 kg	Overall	100x25mm
Nett	1.0 kg		

PLU 7



WEIGHT		DIMENSIONS	
Gross	2.3 kg	Overall	138x35mm
Nett	2.0 kg	Anode	

PLU 8



— Hole centres 200mm —

WEIGHT		DIMENSIONS	
Gross	1.3 kg	Overall	230x70x30mm
Nett	1.0 kg	Anode	170x70x30mm

PLU 9



— Hole centres 200mm —

WEIGHT		DIMENSIONS	
Gross	2.3 kg	Overall	230x80x40mm
Nett	2.1 kg	Anode	180x80x40mm

PLU 413



WEIGHT		DIMENSIONS	
Gross		Overall	110x25mm

PLU 76



WEIGHT		DIMENSIONS	
Gross		Overall	125x22mm

PLU 75



WEIGHT		DIMENSIONS	
Gross	2.8 kg	Overall	120x35mm

PLU 93



WEIGHT		DIMENSIONS	
Gross	4.5 kg	Overall	130x55mm

Zinc Anodes Bolt On Bar Anode

PLU 415



WEIGHT		DIMENSIONS	
Gross	1.2 kg	Overall	200x65x35mm
		Slot	110mm

PLU 10



— Hole centres 160mm —

WEIGHT		DIMENSIONS	
Gross	2.4 kg	Overall	315x70x40mm
Nett	2.0 kg	Slots	85mm

PLU 11



— Hole centres 200mm —

WEIGHT		DIMENSIONS	
Gross	3.5 kg	Overall	305x78x38mm
Nett	3.0 kg	Core	30x5mm

PLU 12



— Hole centres 200mm —

WEIGHT		DIMENSIONS	
Gross	4.5 kg	Overall	305x88x38mm
Nett	4.0 kg	Core	30x5mm

PLU 13

—10mm Hole centres 180m—



—16mm Hole centres 229mm—

WEIGHT		DIMENSIONS	
Gross	7.6 kg	Overall	450x102x40mm
Nett	7.0 kg	Core	40x5mm

PLU 14



— Hole centres 229mm —

WEIGHT		DIMENSIONS	
Gross	12.8 kg	Overall	457x102x64mm
Nett	12.0 kg	Anode	40x5mm

PLU 420



Strip Anode -Nicholson 32

WEIGHT		DIMENSIONS	
Gross		Overall	
Nett			

PLU 414



Strip Anode -Hole centres 150mm

WEIGHT		DIMENSIONS	
Gross		Overall	300x45x11mm
Nett			

Zinc Anodes Bolt On Bar Anode

PLU 532



Hole centres 144mm

WEIGHT		DIMENSIONS	
Gross	0.5 kg	Overall	120x45x21mm
		Slot	

PLU 533



Hole centres 160mm

WEIGHT		DIMENSIONS	
Gross	1.0 kg	Overall	140x60x25mm
Nett		Slots	85mm

PLU 571



Hole centres 70mm

WEIGHT		DIMENSIONS	
Gross	1.5 kg	Overall	145x67x20mm
Nett		Core	

PLU 624



Hole centres 70mm

WEIGHT		DIMENSIONS	
Gross	3.2kg	Overall	100x200x30mm
Nett		Core	

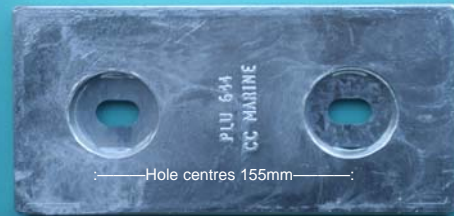
PLU 645



Hole centres 35-102mm

WEIGHT		DIMENSIONS	
Gross	1.10kg	Overall	150x 98x12mm
Nett	1.07kg	Core	

PLU 644



Hole centres 155mm

WEIGHT		DIMENSIONS	
Gross		Overall	300 x150 x26mm
Nett	7.5	Anode	

PLU 598



WEIGHT		DIMENSIONS	
Gross	1kg	Overall	
Nett			

PLU

WEIGHT		DIMENSIONS	
Gross		Overall	
Nett			

Zinc Shaft & Collar Anodes

SHAFT ANODES



Code	Shaft diameter
PLU 34	3/4"
PLU 35	7/8"
PLU 36	1"
PLU 37	1-1/8"
PLU 38	1-1/4"
PLU 39	1-3/8"
PLU 40	1-1/2"
PLU 41	1-3/4"
PLU 42	2"
PLU 368	2 1/4"
PLU 369	2 1/2"
PLU 43	2-3/4"
PLU 370	3"
PLU 44	25mm
PLU 45	30mm
PLU 46	40mm
PLU 47	50mm
PLU 48	60 mm

COLLAR ANODES



Code	Shaft diameter
PLU 49	3/4"
PLU 50	7/8"
PLU 51	1"
PLU 455	1 3/4"
PLU 456	1 3/8"

PLU 52



DIMENSIONS		
Twin Disc	Overall	48x15mm
	Each Disc	48x7.5mm

PLU 413



WEIGHT		DIMENSIONS	
Gross		Overall	110x25mm
			10mm hole

PLU 53



DIMENSIONS		
Twin Disc	Overall	74x28mm
	Each Disc	74x14mm

PLU 76



WEIGHT		DIMENSIONS	
Gross		Overall	125x22mm
			10mm hole

PLU 54



DIMENSIONS		
Twin Disc	Overall	95x28mm
	Each Disc	95x14mm

PLU 480



WEIGHT		DIMENSIONS	
Gross		Overall	70x17mm
Nett			8mm hole

PLU 92



DIMENSIONS	
Overall	130x50x18mm

PLU 7 & 6



See page 4

WEIGHT		DIMENSIONS	
Gross	1.3/2.3 kg	Overall	100/138x35mm
Nett	1.0/2.0 kg	Anode	

Zinc Anodes Tail Shaft



Shaft Diameter 25mm
Fitting Key Way



Shaft Diameter 30mm
Fitting Key Way



Shaft Diameter 35mm
Fitting Key Way



Shaft Diameter 40mm
Fitting Key Way



Shaft Diameter 45mm
Fitting Key Way



Shaft Diameter 60mm
Fitting Key Way



Shaft Diameter 50mm
Fitting Hex Nut



Diameter 68mm
Fitting Square 46.5mm

Zinc Anodes Tail Shaft

PLU 621



Outside Diameter 37mm
Fitting solé

PLU 622



Outside Diameter 47mm
Fitting solé

PLU 623



Outside Diameter 52mm
Fitting solé

PLU 619



Shaft Diameter 35mm
Fitting Hex Nut

PLU 620



Shaft Diameter 40mm
Fitting Hex Nut

PLU 77



Shaft Diameter 45mm
Fitting Hex Nut

PLU 78



Shaft Diameter 50mm
Fitting Hex Nut

PLU 79



Shaft Diameter 60mm
Fitting Hex Nut

STERNDRIVE AND OUTBOARD



PLU 64



PLU 69



PLU 63



Code	Required
PLU 64	1
PLU 69	2
PLU 63	1
PLU 447	Kit of above

MerCruiser Alpha One Generation II

PLU 63



PLU 64



PLU 65



PLU 67



Code	Required
PLU 63	1
PLU 64	1
PLU 65	2
PLU 67	1
PLU 448	Kit of Above

Mercruiser Bravo Generation I, II or III

PLU 63



Code	Required
PLU 63	1
PLU 66	2
PLU 70	1
PLU 68	1
PLU 449	Kit of Above

PLU 66



PLU 70



PLU 68



Zinc Anodes Mercruiser Various

PLU 73



150-250 ALPHA

DIMENSIONS

Overall 90x23mm

PLU 74



HP 225-250 BRAVO

DIMENSIONS

Overall 112x18mm

PLU 72



ALPHA ONE

DIMENSIONS

Overall 84(82)x25mm

PLU 452



HP 40-75

DIMENSIONS

HP 40-250

Overall 190x45x11mm

PLU 416



Hp 8-15-20

DIMENSIONS

Overall 80x24x12mm

Honda Anodes

Volvo Single Prop Outdrive

PLU 57



Code	Required
PLU 57	1
PLU 55	1
PLU 450	Kit of Above

PLU 55



Volvo Duo Prop Outdrive

PLU 55



PLU 56



PLU 58



PLU 57



Code	Required
PLU 55	1
PLU 56	1
PLU 58	2
PLU 57	1
PLU 451	Kit of Above

Zinc Anodes Various Volvo



3586963	DIMENSIONS	
SAILDRIVE	Overall	140(105)x27mm



875815	DIMENSIONS	
F-VP-280	Overall	155(115)x35mm



875812	DIMENSIONS	
F-VP/C	Overall	140(107)x45mm



876286	DIMENSIONS	
SEADRIVE	Overall	120(95)x28mm



	DIMENSIONS	
F-VP-700	Overall	38x22x15mm



3858399	DIMENSIONS	
	Overall	38x22x15mm



	DIMENSIONS	
F-VP-41	Overall	120X40X24mm
DPH-DPR	Hole centre	86mm



	DIMENSIONS	
F-VP-40	Overall	130x78(40)
DPH	Hole centre	35mm

Zinc Anodes Various Volvo

PLU 468



F-VPX-38
DPX

DIMENSIONS

Overall 140(105)x27mm

PLU 467



872139
F-VPX-39
DPX

DIMENSIONS

Overall 155(115)x35mm

PLU 492



F-VP-800

DIMENSIONS

Overall 53x25x18mm

PLU 619

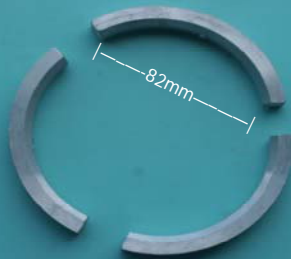


F-VP-600

DIMENSIONS

Overall height 22
Diameter 30

PLU 625



DIMENSIONS

Overall 38x22x15mm

PLU 626

**NO IMAGE
AVAILABLE**

852818

DIMENSIONS

FVP-120

Overall 61X16MM
CRESCENT

PLU 59



832598

DIMENSIONS

P-VP

Overall 188X41X22
Hole Centres 145MM

PLU

ISOTHERM

DIMENSIONS

Overall
Hole centre

Bow Thruster Anodes

PLU 419



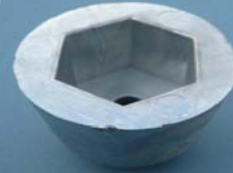
SIDE POWER

Bow thrusters

DIMENSIONS

Overall 46Øx 40mm

PLU 60



SLEIPNER

Bow thrusters

DIMENSIONS

Overall 42Ø x36mm

PLU 89



SLEIPNER

DIMENSIONS

Overall 44x20mm

PLU 639

NO IMAGE AVAILABLE

PLU 90



DIMENSIONS

F-BC-5

Overall 56x15mm

Vetus Anodes

PLU 82



DIMENSIONS

F-BC-3

Overall 40x24mm

PLU 88



DIMENSIONS

F-BC-4

Overall 50x17mm

J Prop Anodes

PLU 62



DIMENSIONS

Overall 80Øx33mm
Hole 10mm

PLU 491



DIMENSIONS

Overall 60Øx27mm
Hole 8.5mm

PLU 89

DIMENSIONS

PLU

DIMENSIONS

Bukh Anodes

PLU 458



WEIGHT

DIMENSIONS

PLU 94



DIMENSIONS

Overall 140(105)x40mm

PLU 95



DIMENSIONS

Overall 73x40mm

PLU 96



DIMENSIONS

Overall 84x60mm

PLU 97



DIMENSIONS

Overall 100x60mm

PLU 383



DIMENSIONS

Overall 68x54mm

PLU 382



DIMENSIONS

Overall 60x38mm

PLU 640



DIMENSIONS

Overall
Hole

PLU 595



DIMENSIONS

Overall 36Øx51mm

Gori Anodes



DIMENSIONS
Overall



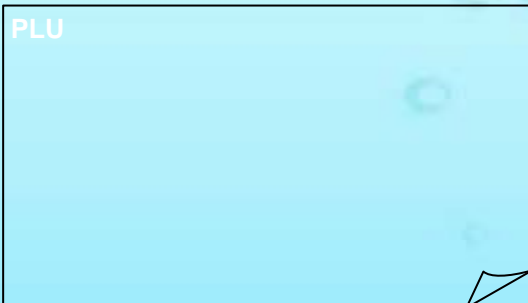
DIMENSIONS
Overall 25x 16H mm
Hole 8.5mm



DIMENSIONS
ID 60mm Ø
OD 95mm Ø x 34



DIMENSIONS
ID 80mm Ø
OD 97mm Ø x 40



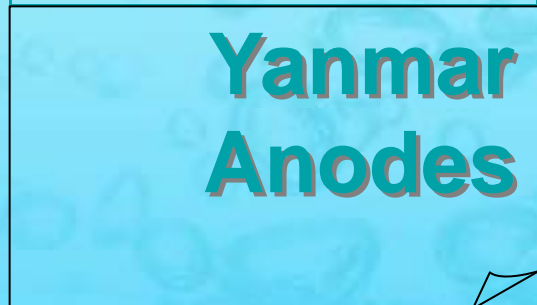
DIMENSIONS
Overall



DIMENSIONS
Overall



DIMENSIONS OD 107mm Ø x 25mm
Overall 148mm



DIMENSIONS
Overall

Zinc Pencil Anodes

PLU 374



YANMAR

DIMENSIONS

Overall 16X52
Thread 7/16 unf

PLU 643



DIMENSIONS

Overall 2"x 3/4"
1/2" unc

PLU 373



CUMMINS

DIMENSIONS

Overall 16X50MM
15.5mm

PLU 458



BUKH

DIMENSIONS

F-VP-600 Overall 12X35
Thread 5ma

PLU 625

DIMENSIONS

Overall 38x22x15mm

PLU

Fridge Anodes

DIMENSIONS

Overall 38x22x15mm

PLU 572



FRIGABOAT

DIMENSIONS

Overall 35Ø X 10MM
Hole 7MM

PLU 573



ISOTHERM

DIMENSIONS

Overall
Hole centre

Zinc Anodes Weld On

PLU 1



WEIGHT		DIMENSIONS	
Gross	1.2 kg	Overall	260x60x32mm
Nett	1.0 kg	Anode	180x60x32mm

PLU 2



WEIGHT		DIMENSIONS	
Gross	2.2 kg	Overall	300x75x38mm
Nett	2.0 kg	Anode	220x75x38mm

PLU 3



WEIGHT		DIMENSIONS	
Gross	3.2 kg	Overall	300x95x30mm
Nett	3.0 kg	Anode	200x95x30mm

PLU 4



WEIGHT		DIMENSIONS	
Gross	4.5 kg	Overall	440x85x45mm
Nett	4.0 kg	Anode	305x85x45mm

PLU 5



WEIGHT		DIMENSIONS	
Gross	8.6 kg	Overall	450x155x30mm
Nett	8.0 kg	Anode	300x155x30mm

Aluminium Anodes Weld and Bolt On

PLU 15



WEIGHT		DIMENSIONS	
Gross	0.45 kg	Overall	200x40x25mm
Nett	0.40 kg	Anode	120x40x25mm

PLU 16



WEIGHT		DIMENSIONS	
Gross	0.85 kg	Overall	300x75x38mm
Nett	0.8 kg	Anode	220x75x38mm

PLU 17



WEIGHT		DIMENSIONS	
Gross	1.3 kg	Overall	300x95x30mm
Nett	1.2 kg	Anode	200x95x30mm

PLU 19 – 0.65kg
PLU 22 – 0.95kg



WEIGHT		DIMENSIONS	
PLU 19 Nett	0.4 kg	Overall	230x70x30mm
PLU 22 Nett	0.8 kg	Overall	230x80x40mm

PLU 18



WEIGHT		DIMENSIONS	
Gross	0.7 kg	Overall	100x25mm
Nett	0.4 kg		

PLU 21



WEIGHT		DIMENSIONS	
Gross	1.15 kg	Overall	138x35mm
Nett	0.85 kg		

PLU 23



————— Hole centres 200mm —————

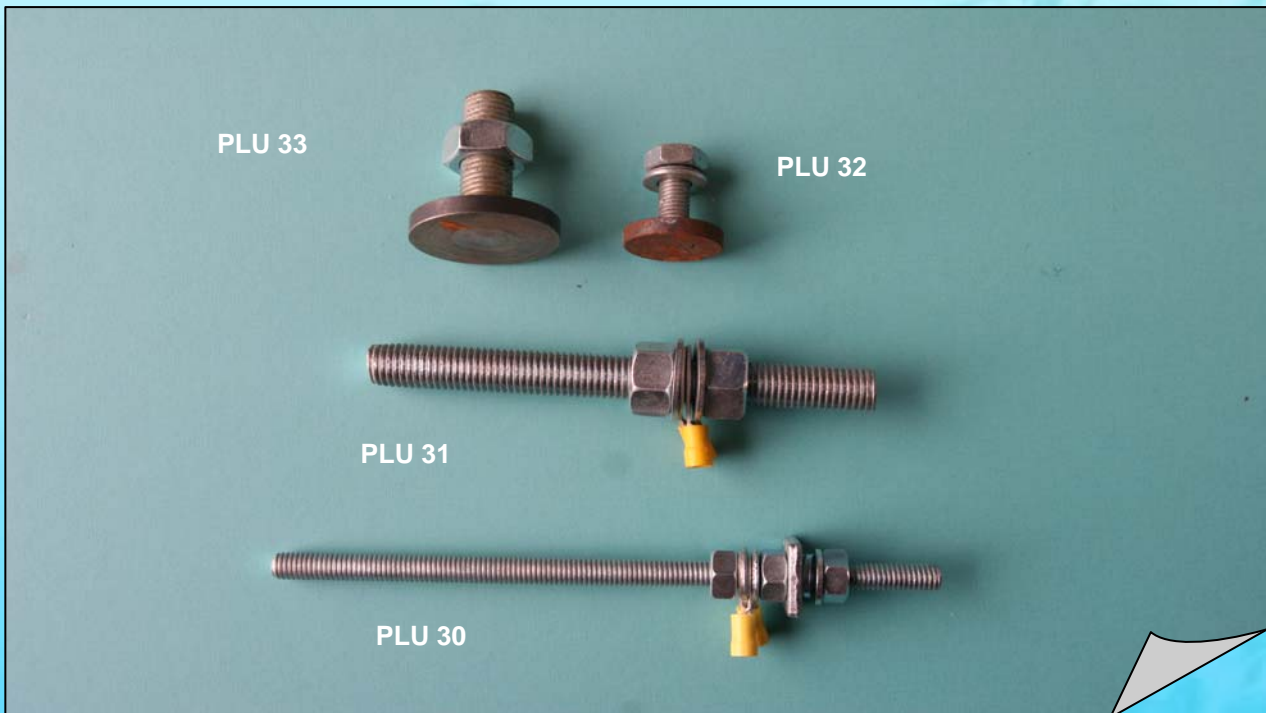
WEIGHT		DIMENSIONS	
Gross	1.8 kg	Overall	305x78x38mm
Nett	1.3 kg	Core	30x5mm

PLU 24



————— Hole centres 200mm —————

WEIGHT		DIMENSIONS	
Gross	2.0 kg	Overall	305x88x38mm
Nett	1.5 kg	Core	30x5mm

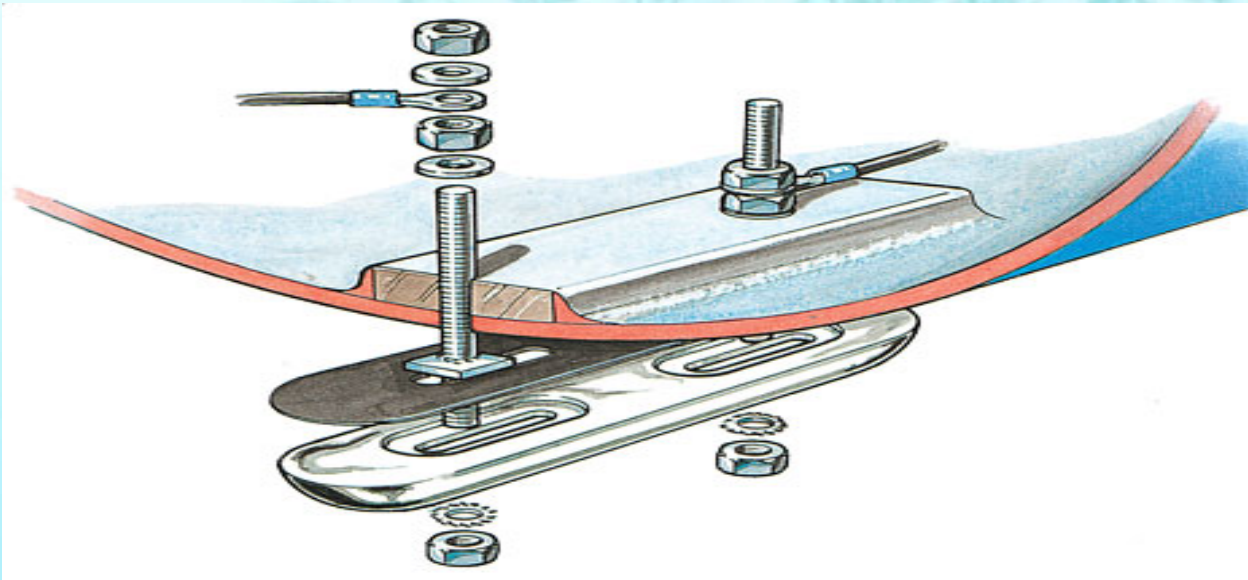


When fitting anodes to **WOODEN or **GRP** hulled vessels remember:**

- The anode should be positioned on the outside of the hull below the waterline.
- The anodes can "see" the parts to be protected.
- The fixing studs are located above the bilges.
- The anode location ensures the minimum run of bonding cable to the parts to be protected.
- There must be reasonable internal access to the studs.

The anode should not be positioned forward of or in line with Echo Sounding Transducers or log Impellers.

Hull Anode Installation



- Stiffen the inside of the hull where the anode is to be fitted if necessary.
- Drill holes to take the fixing studs at the appropriate centers.
- On wooden hulled vessels studs should be sleeved or painted to insulate them from the surrounding timber. When sleeving the stud either use a heat shrink tube or ensure that the inside of the sleeve is packed with a suitable marine grade sealant.
- Before inserting and securing each stud assembly, apply a generous amount of marine grade sealant to the shank and collar where the stud touches the hull to ensure a good seal.
- Whenever an anode is fitted to a GRP or wooden hull an anode backing sheet must be used to control the wastage of the anode and protect the hull. The anode backing sheet should be replaced each time the anode is replaced.
- Always ensure that the anodes are fitted with Fan Disc Washers under the securing nuts which will help to assure the contact between anode and cathodic protection system. The fan disc washers and nuts should be replaced each time the anode is replaced.
- Protect the anode fixing studs on assembly with paint or grease inside and outside the vessel.

DO NOT PAINT THE WORKING SURFACE OF THE ANODE

Guidelines for the application of anodes

To determine the number and type of anodes you will need, it is important to take the water and mooring place of the vessel into account. The electric current of an anode depends on the water conduction. For example, an anode in salt water has a higher electric current than the same kind of anode in fresh water. As a result the anode in fresh water has a longer life span.

The electric current is modified by the surface area of the anode, so in brackish and fresh water it is better to apply several small anodes than one large anode. The electric current also depends on the material. Magnesium has the highest electric current and zinc the lowest. The electric current of aluminium is somewhat higher than the current of zinc.

Anode material in relation to waters and mooring places

If a vessel is only to be found on fresh waters, magnesium anodes can best be used. If a ship mainly sails on salt water and every now and then in brackish water, zinc is the right anode material. When the vessel has varying waters and mooring places, aluminium can best be used. Aluminium anodes are also the most environment-friendly anodes. Aluminium is suitable for either salt, brackish or fresh water.

Life span of the anodes

The anode protection is at least enough for a period between two slip services. The anode consumption depends on a lot of factors. In general, replacement of the anodes is advised when the anodes are consumed for 70 to 80%.

Place of the anodes on the vessel

In the picture the place of the anodes is calculated as followed: seen from the stern an interval is taken equal to

$\frac{\text{length of the water line}}{\text{number of anodes}}$

Don't forget to protect your rudder with anodes as well!

