

WE ARE MORE THAN JUST ANTIFOULING
WE ADD 'PARTNER' TO YOUR SHIP.

MARELCO™
electrolytic antifouling

 **EMCS**
INDUSTRIES LTD.

emcsindustries.com

BE FREE FROM MARINE FOULING.

TABLE OF CONTENTS

PAGE

MARELCO™ Anode Types	03
MARELCO™ Typical Installs	04
MARELCO™ Anode Tape	05
MARELCO™ Safety Cap & Studs	06
MARELCO™ Anode Cage	07
MARELCO™ Treatment Tank	08
LIBERATOR™ Control Panel	09
SEAFARER™ Digital Software	10
EMCS Industries LTD. History	11



MARELCO™

ANODE TYPES



Spirax



Plenty



Super Plenty



Iron



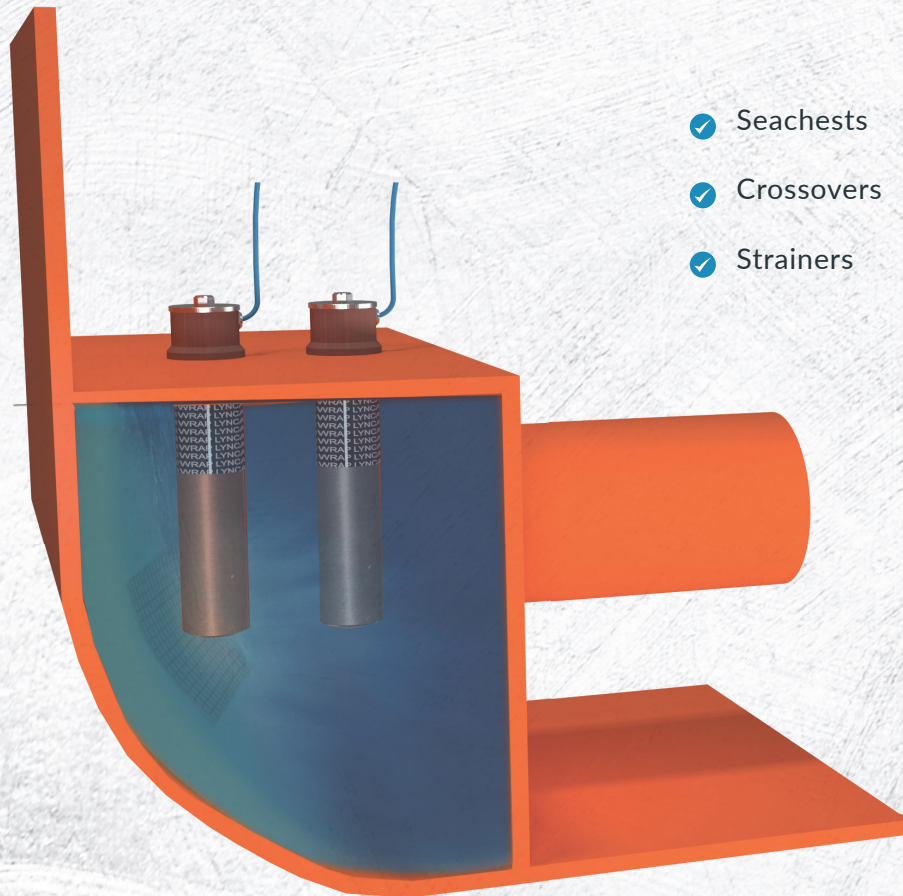
Aluminium



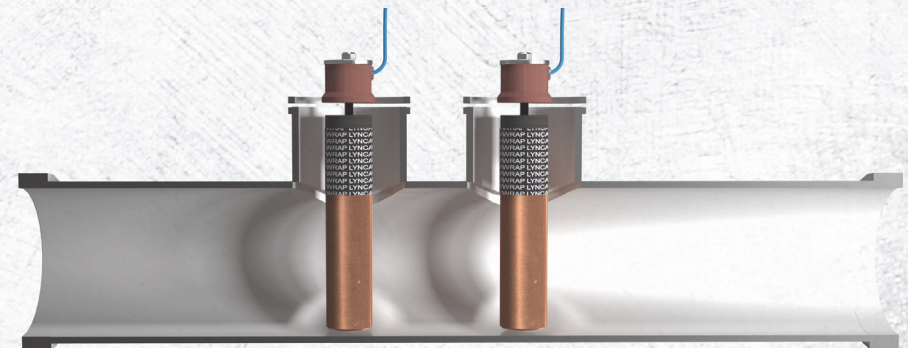
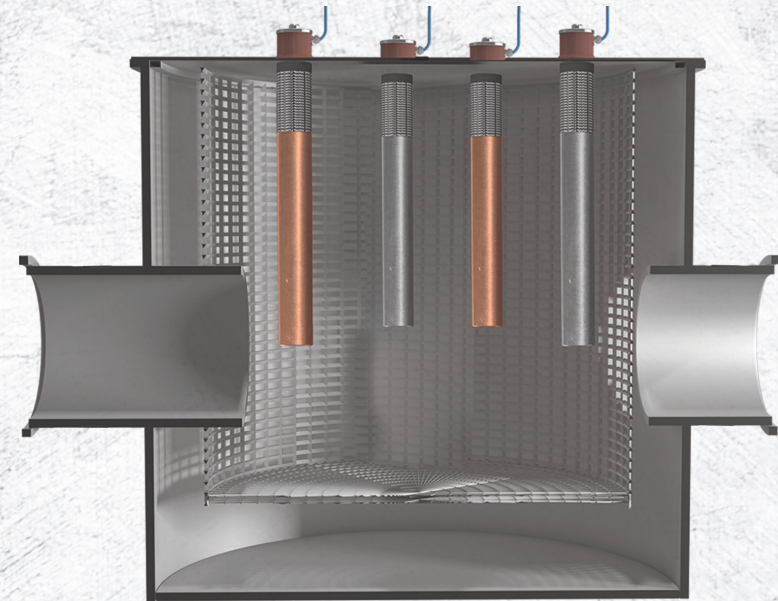
Copper

MARELCO™

TYPICAL INSTALLS



- ✓ Seachests
- ✓ Crossovers
- ✓ Strainers



MARELCO™ DIFFERENCE

#1. ANODE TAPE

Invented by EMCS Industries Ltd in 1955.

Our anodes use an impressed current electrolytic anode technology to prevent marine growth and corrosion in ships and industrial seawater systems.

- COPPER ANODES
- ALUMINUM ANODES
- IRON ANODES
- SPIRAX, PLENTY AND SUPER PLENTY ANODES

Standard sizes range from 3.25" to 5" diameter & 12" to 36" in length.

The MARELCO™ difference is in our special formulated tape.

This innovative tape is attached directly to the anode with a water-resistant adhesive. Having the tape connected directly to the anode, ensures that no sea water ingress occurs and therefore the anodes will not snap off during operation.

Other anode brands use a heat shrink rubber that over time allows the sea water to creep under the rubber and eventually erode the anode to a point where it can snap off long before its life cycle expires.

MARELCO™

COMPETITOR

MARELCO DIFFERENCE™

#2. SAFETY CAP

#3. STUDS

Another MARELCO™ difference is in our Safety Caps & Studs.

The wire exits on the side of the safety cap, instead of on top. This prevents wires from being stepped on or becoming damaged from exposure to the elements on board ship. The cap makes sure the anode connection is fully protected, easily accessed and prevents electrical shorts.

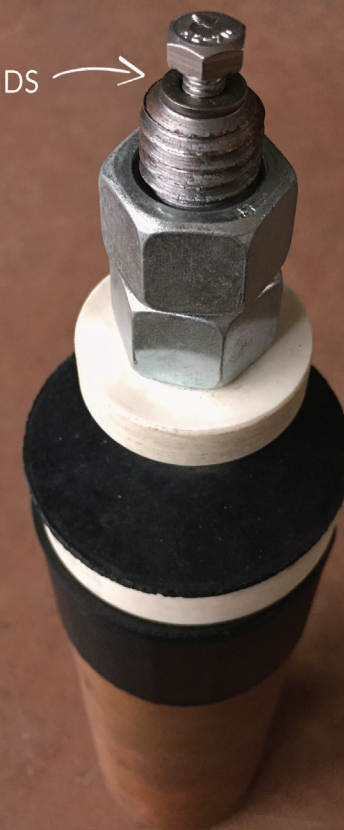
We insulate our studs from the anode; we have eliminated 'hot studs' therefore increasing worker safety and the life of the anode.

MARELCO™
INSULATED STUDS.



OTHER BRANDS
HOT STUDS.

X

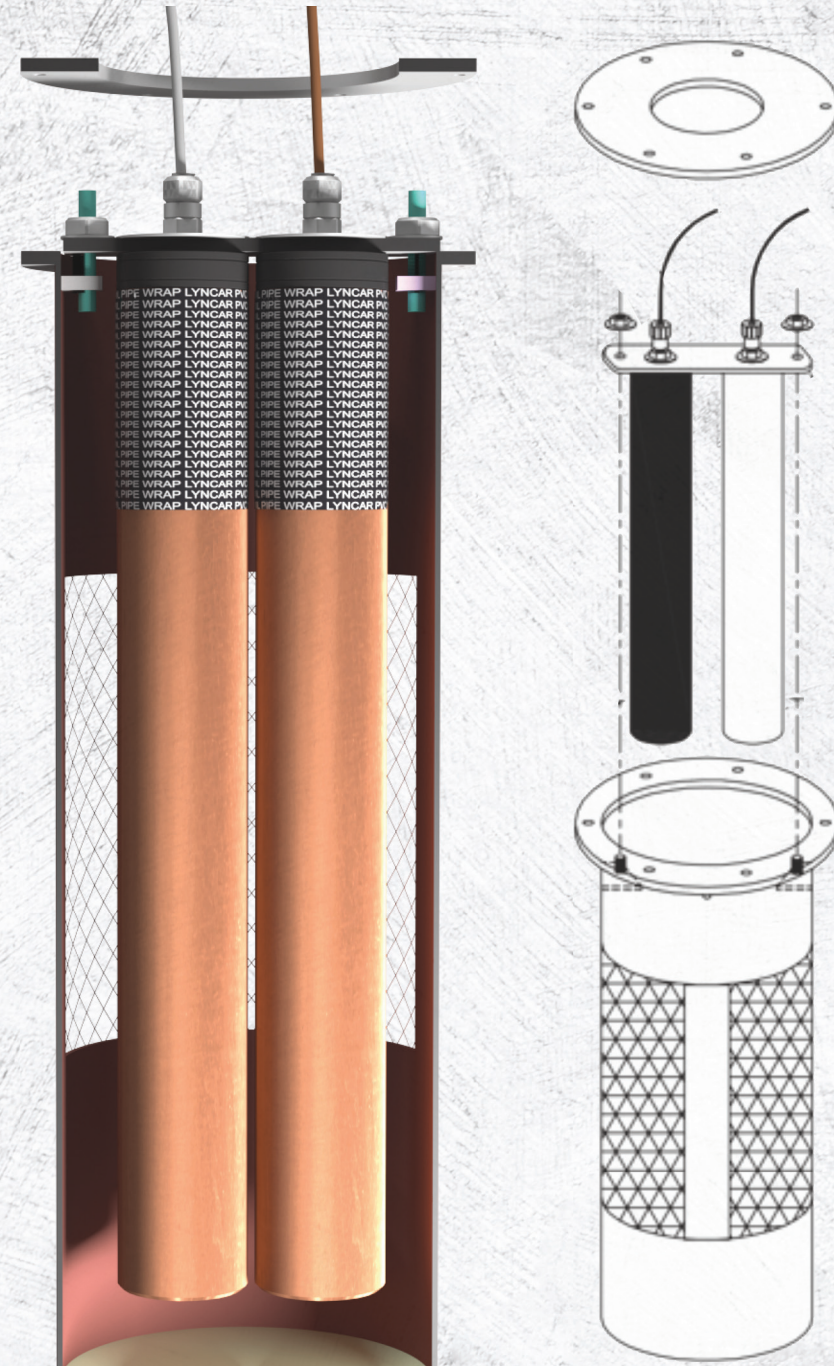


MARELCO™ ANODE CAGE

Used to protect intake pumps and piping systems or submersible pumps, anode cages are most commonly found on offshore platforms where salt water is pumped from the ocean to cool drilling machinery.

The system prevents the intake from the ocean becoming completely plugged with marine life and also serves to protect the entire system from corrosion due to salt water exposure.

- ✓ Offshore Platforms
- ✓ Marine Stations
- ✓ DFO Pumps



MARELCO™ TREATMENT TANK.

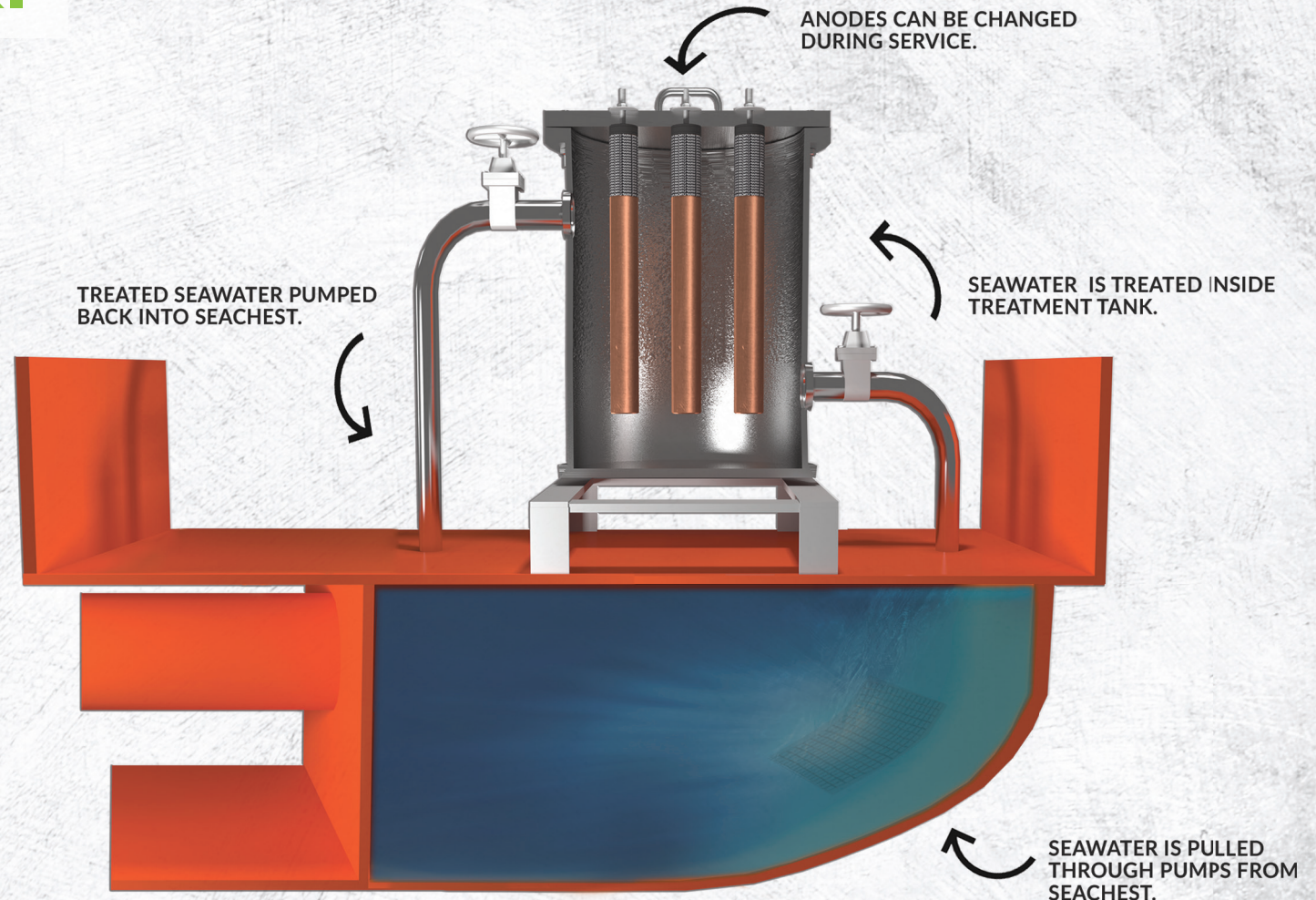
GREAT FOR SCRUBBER SYSTEMS OR VESSELS
WITH SMALL OR NO SEACHESTS.

**Interchangeable anodes will help
guarantee protection between
drydocks.**

The treatment tank can be used for a variety of applications to pull the seawater from the seachest or piping system by means of a pump.

When seawater is in the treatment tank, the MARELCO™ system adds the ions to the water; then pumps the treated seawater back into the pipes or seachest.

This protects pipes and pumps in the same way without any redesign or retrofit.



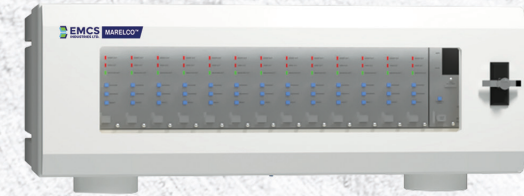
LIBERATOR™ CONTROL PANEL



48 Outlet Panel



4 Outlet Panel



12 Outlet Panel

**CUSTOM PANEL SIZES FOR
YOUR VESSELS.**



Maximize your MARELCO™ Anodes performance.
Avoid manual monitoring by adding the Seafarer Software.

The LIBERATOR™ constant current control unit is contained in an IP66 rated cabinet which incorporates all solid state circuitry and heavy-duty components produced to meet any specification.

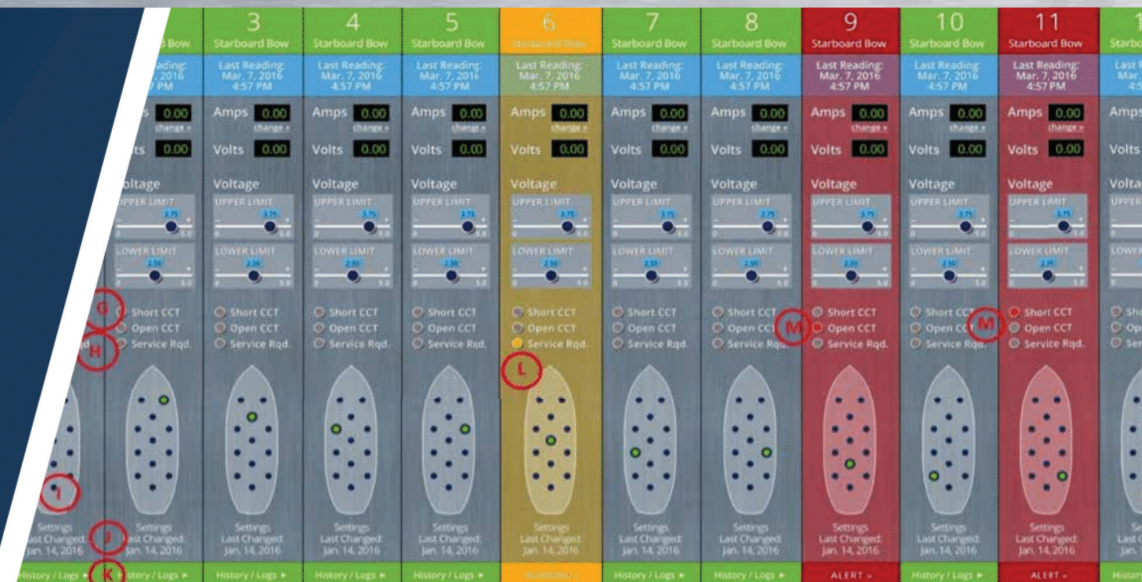
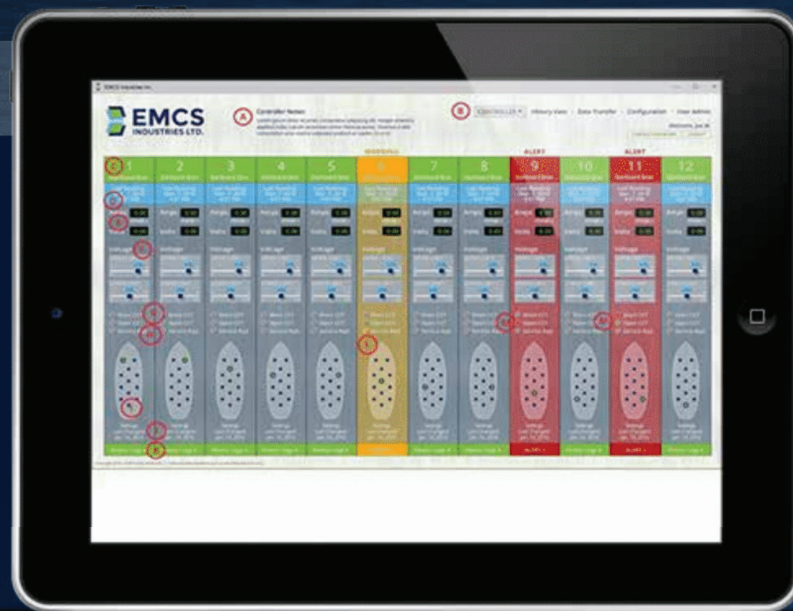
- ✓ Cabinet exterior is corrosion and oil stain resistant
- ✓ Coated with baked marine enamel
- ✓ Power consumption is less than 0.5 kW
- ✓ Fully automatic; utilizes power from on board service supply
- ✓ Transformer converts the AC supply to low DC voltage

SEAFARER™ DIGITAL SOFTWARE



**Automatically manages your anodes for maximum life span.
Records all data for each anode for ease of reference.**

- ✓ Select from a drop-down list when multiple control panels are onboard
- ✓ Easily access information on where in the ship an anode is mounted
- ✓ Displays most recent voltage and current
- ✓ Remotely adjust the current for each anode
- ✓ Changes can only be made by approved users
- ✓ Voltage sliders are pre-set, making sure they stay within limits
- ✓ Each card has a direct link to its own history and change logs
- ✓ Each card shows the date that its settings were most recently changed
- ✓ Display changes to yellow when an anode needs to be replaced soon
- ✓ Display changes to red when an anode needs to be replaced immediately



EMCS INDUSTRIES LTD.

OUR HISTORY

Did you know that our founders invented **THE FIRST Marine Growth Protection System**?

That's right! Over sixty two years ago, two Canadian men invented an innovative new product that would later become the international standard for Marine Growth Protection Systems (MGPS) —the Cathelco System.

Frank and Lauder were in business! In 1955, the two founded Electrolytic Marine Corrosion Services (known today as EMCS Industries) in Victoria, B.C., Canada. But Frank and Lauder could see worldwide applications for the system and set their sights high. The men found partners—Commander Patrick Heathfield, William Salisbury and Harry Gale—to expand and promote their brand abroad. Keeping up with the fast-paced market, Cathodic & Electrolytic Engineers Ltd. opened in 1956 in the UK to sell the Cathelco System under license from EMCS.

In 1983, Lauder and Frank thought it was time to abbreviate their company's name to EMCS Industries Ltd. In 1989 the North American and UK partners ceased their relationship and William Salisbury changed the UK company name from Cathodic & Electrolytic Engineers Ltd. to Cathelco Ltd.

The UK company name change created much confusion between the now competitors, so the Canadians re-branded their system to MARELCO™. Now everyone would know their name, and their revolutionary product!

EMCS was owned by the Ramsay family until 2015, when the company was bought by EMWCS Inc. and appointed Trevor Tasker as the new President and CEO. EMCS is now moving full-steam ahead, re-branding and expanding the already successful business.

#wegiveaship



MARELCO™
Electrolytic Antifouling



www.emcsindustries.com



1.844.433.EMCS (3627)



Sidney, BC, Canada