





EMCS INDUSTRIES LTD.

MANUFACTURERS OF MARELCO™ SOLUTIONS + DISTRIBUTORS OF CATHELCO PRODUCTS

Inventors of the first-ever Electrolytic Marine Growth Protection System (MGPS), with unparalleled expertise and commitment to technical innovation has enable us to provide tailored, effective solutions for biofouling management and corrosion prevention across the marine industry.

Welcome to EMCS Industries, where decades of maritime innovation have positioned us as the leading experts in managing biofouling and preventing marine corrosion.

FOUNDATIONAL INNOVATION:

- We are the inventors of the pioneering Electrolytic Marine Growth Protection System (MGPS), which sets industry standards in maritime protection.

EXPERTISE & DEDICATION:

- With unmatched expertise and a relentless pursuit of innovation, we provide customized, effective solutions for the complex challenges of biofouling and corrosion.

BEYOND MANUFACTURING:

- We are not just manufacturers but committed partners in enhancing your fleet's operational, financial, and environmental performance.



MISSION STATEMENT

We are committed to the United Nations Department of Economic and Social Affairs' Goal 14 (Life Below Water) of sustainable development. We continue to invest in research and development to support our mandate to be accountable and respectful and to look after the world's vulnerable ocean ecosystems while contributing to the Blue Economy.

VISION STATEMENT

We are innovators in antifouling and corrosion protection and will continue to pioneer solutions that reduce costs, improve performance, and protect the marine environment. In addition, we will collaborate with like-minded businesses, create employment opportunities, and contribute to the economy while preserving the oceans' resources.

OUR PROMISE:

Join us in transforming maritime operations. With EMCS Industries, safeguard your fleet against biofouling and corrosion, ensuring peak efficiency, compliance, and environmental stewardship.



WHAT IS BIOFOULING?

Biofouling, the accumulation of marine organisms such as barnacles and mussels, poses a critical challenge for both maritime vessels and static marine assets, though the impact differs significantly between the two. For vessels, biofouling affects submerged parts of the hull and seawater systems, leading to reduced speed, decreased fuel efficiency, higher emissions, and increased maintenance costs. It can even cause blockages that result in operational shutdowns, posing serious safety risks. Additionally, vessel biofouling spreads invasive species, threatening marine biodiversity—a major concern for the Blue Economy.

On static marine assets like offshore monitoring stations, oil rigs, and aquaculture installations, biofouling presents unique challenges. The stationary nature of these structures makes them particularly vulnerable to the persistent buildup of marine organisms, which can increase operational costs and maintenance needs while also accelerating corrosion, compromising structural integrity and safety. In aquaculture, biofouling can threaten fish health and biosecurity, complicating efforts to maintain clean waterways and a sustainable marine economy.

Recognizing these challenges is essential for developing effective antifouling strategies that protect both types of marine assets and support the sustainability of marine operations.



WHAT IS MARINE CORROSION?

An ocean-going vessel relies heavily on seawater. Unfortunately, the saltwater makes the internal piping systems of the vessel subject to corrosion. In addition, biofouling exacerbates corrosion ("microbiologically influenced corrosion") of a vessel's hull and the internal seawater systems. EMCS Industries offer turnkey solutions that protect against corrosion, increasing the ship's efficiency, leading to longer life, less maintenance, and avoiding expensive redesign.

Additional corrosion protection is needed for the exterior of the vessel. Vessels built with steel hulls must be fitted with an anticorrosion system such as Impressed Cathodic Current Protection. ICCP system provides corrosion protection via among other things a shaft grounding system that removes the current produced by the ICCP anodes. This electrical grounding is done by the hull physically touching a grounded object or through a highly conductive solution such as saltwater, freshwater with high mineral content, and polluted freshwater. The system helps to prevent further corrosion of the propeller, shaft, and other critical parts of a ship's propulsion system.

Managing biofouling of ships' internal seawater systems and exterior hulls will reduce the likelihood of catalyzing microbiologically influenced corrosion and minimize external corrosion of the vessel.



MARLECO™ SOLUTIONS



SURICLE

A patented polyurethane film embedded with micro particles via a patented process, wrapped around surfaces to provide a durable, non-conductive barrier preventing marine growth and corrosion, reducing maintenance costs, and improving worker safety



GUARDIAN

An electrolytic marine growth protection system (MGPS) that also provides corrosion control for internal systems exposed to the intake of seawater.



LIBERATOR

An electrolytic above-deck MGPS that reduces marine growth and corrosion of internal systems exposed to the intake of seawater for a variety of applications



DEEP

Anode cages custom designed and built for a new or existing system that protects submersible pumps or intake pipes from marine fouling and corrosion, used on FPSO, seawater intake pipes, hydro and desalination plants.



Cathelco[®]

We are the exclusive North American parts and service provider for Evac's Cathelco. This partnership will further enhance the turnkey service you are accustomed to from EMCS and significantly improve our product and service offering to our valued North American customers.

EMCS Industries and Cathelco have a shared history and aligned values that began in Canada 68 years ago. Our motivation for entering this agreement is to provide our customers with a focused provider in North America, offering you an unparalleled wealth of experience in antifouling + anticorrosion systems.

MARINE GROWTH PREVENTION SYSTEMS

Cathelco marine growth prevention systems (MGPSs) for seawater pipework are easy and economical to install. Designed to eliminate blockages caused by barnacle and mussel growth in seawater cooling lines, the systems are available for vessels of every size including mini systems for luxury yachts.

IMPRESSED CURRENT CATHODIC PROTECTION

The ICCP (Impressed Current Cathodic Protection) System will give adequate corrosion protection to the hull of a ship over the life of the vessel in conjunction with a compatible protective coating system.



BIOFOULING MANAGEMENT ASSESSMENTS:

Discover how EMCS Industries Ltd. can transform your maritime operations! Since our inception in 1955, we've led the fight against biofouling and marine corrosion. Our pioneering Electrolytic Marine Growth Protection System (MGPS) underscores our dedication to innovation and sustainable practices within the marine industry.

We champion regular maintenance and preventative tactics to combat biofouling, which affects everything from the hull's exterior to the intricate internal systems. We recommend that every vessel undertake a Biofouling Management Assessment; this strategy helps extend vessels' lifespans, enhance operational efficiency, and ensure regulation compliance.

EMCS Industries Ltd. is committed to equipping our clients with the expertise and resources needed for efficient and sustainable vessel maintenance and operations. We excel in delivering in-depth insights and comprehensive feedback on managing biofouling and corrosion for marine vessels. Whether your fleet requires a complete overhaul of the MGPS system or minor repairs, our dedicated team is committed to ensuring that your vessels operate flawlessly.

By partnering with us, you gain access to our expertise in tailoring solutions that meet your unique maritime challenges, guaranteeing your fleet's highest level of protection and operational efficiency.



LOCATIONS

Headquarters & North American Manufacturing

Unit 5/6 – 10114 McDonald Park Rd,
North Saanich, BC V8L 5X8, Canada

P. +1.844.433.EMCS (3627)

P +1.250.656.5366

F. +1.250.656.5344

Atlantic Canada Technical Base

Charlottetown, Prince Edward Island, Canada

P. +1.844.433. EMCS (3627)

Singapore South East Asia Technical Base

18 Kaki Bukit Road 3 #02-15 Singapore 415978

P. +1.844.433. EMCS (3627)

Italian Technical Base

Via Ceolla 70 16016 Cogoletto (GE) Italy

P. +1.844.433. EMCS (3627)



SUSTAINABILITY

Our company continues to develop solutions that reduce costs, enhance performance, and safeguard the marine environment. We are dedicated to enhancing the sustainability of our oceans amid challenges like climate change, shifting biodiversity, and increasing human impact. We strive to contribute valuable insights to the Blue Economy through ongoing research and innovation.

Integrity is one of our core values, encompassing accountability and commitment in all our actions. Aligned with Goal 14 (Life Below Water) of the United Nations' 17 goals for ocean sustainability and development, we are dedicated to being accountable for respecting and preserving the oceans and seas.

We plan to engage in extensive research and development to introduce more sustainable antifouling and anticorrosion solutions to the market. This includes partnering with independent scientists to assess the efficacy and environmental impact of our low-frequency acoustic marine growth protection system (MGPS), aiming to enhance it further. Simultaneously, we are developing other innovative, sustainable products to combat biofouling and corrosion.



CUSTOMER REVIEWS

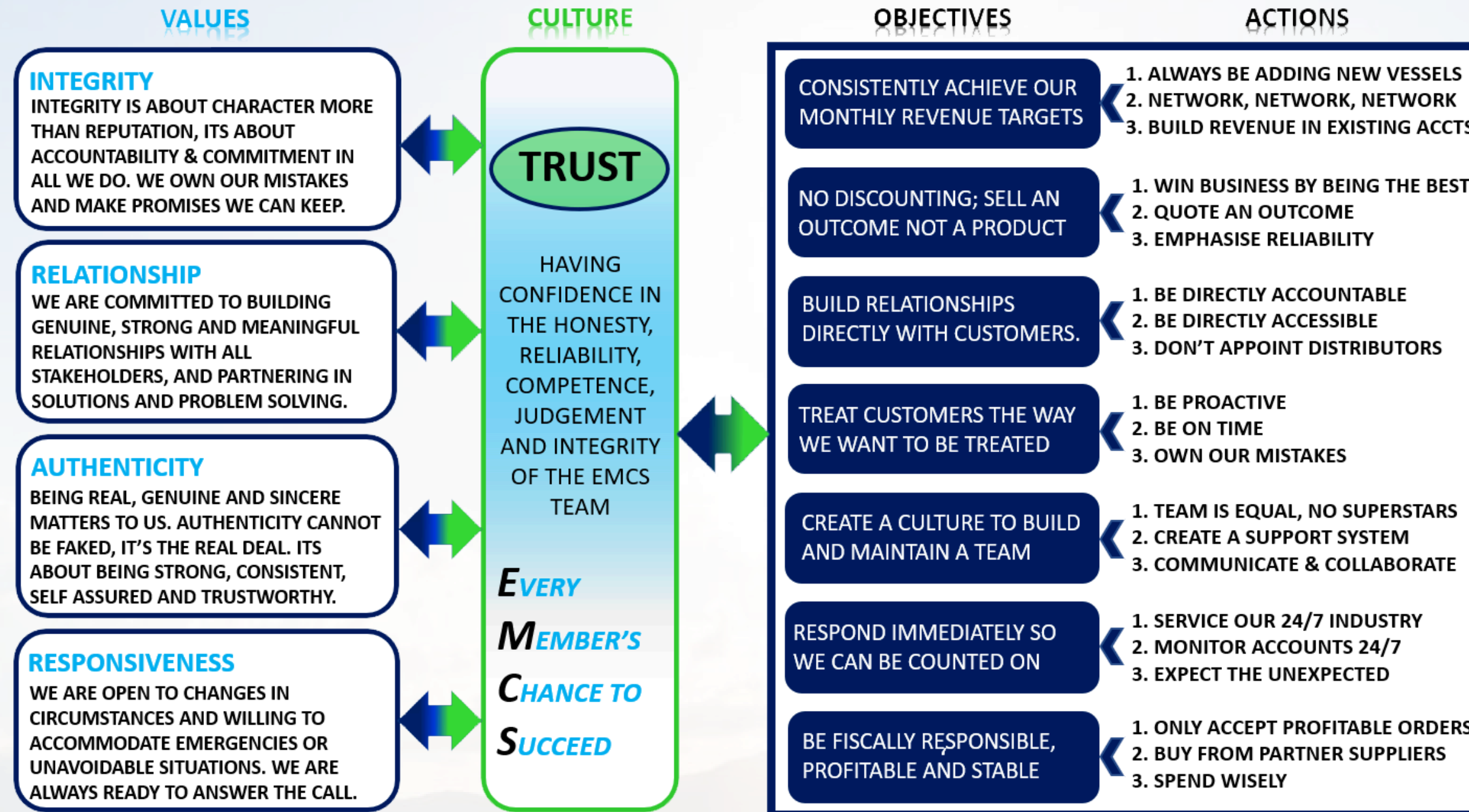
In 2020 we hired an outside consultancy firm to complete a brand audit to ascertain how our business is performing in our customers' eyes and empower us to discover the strengths and weaknesses of our business.

Here is a snapshot of the comments we received as part of this process, as well as further customer reviews.

- EMCS are the leaders. They have some new developments in some upgrades which give us confidence the company has the right portfolio.
- They are innovative as a company; they are prepared to work with the customer for solutions.
- They're passionate about what they do. I see them as a partner, someone I reasonably trust.
- Their diligent efforts to make sure we miss nothing are much appreciated.
- We are grateful to see EMCS's continued improvement and sharing of new ideas with us, which will help both parties to work and understand each other.
- They have quality products and good customer service, and competitive pricing.
- A well-designed system that works.



OUR VALUES



CONTACT US

+1.250.656.5366
+1.844.433.EMCS (3627)

sales@emcsindustries.com

emcsindustries.com



EMCS INDUSTRIES LTD.

Let us help you safeguard your maritime operations against biofouling and corrosion, ensuring efficiency, compliance, and environmental stewardship.

