



ACCG

the creator of antifouling system

WAS ESTABLISHED IN GENOA

# ITALY 1947

ACG is one of the world's most important manufacturers of equipment for the shipping industry and Oil&Gas, with offices and agents across the globe. One of the most important operators in its sector, it offers solutions to marine fouling problems (which cause considerable problems in sea water piping) and helps to control hull corrosion in an ecological, environmentally-friendly manner. It was the world's first company to install antifouling treatment plants onboard vessel; indeed the first electrolysis cells was named after "Doldi Cell", its inventor.

Since it was first established, back in 1947, innovation has always been one of the most important factors of evolution for the company, which has allowed it to expand its market worldwide, offering high-technology products with creative ideas and excellent solutions.

Established in Genoa by its founder, Alessandro Doldi (1908-2001) to produce and market a disinfectant agent, sodium hypochlorite, the company developed considerably with the second generation: Claudio, Carlo and Bianca.

The company has a strong focus on the future and this is what is behind the firm belief that the fundamental drivers of growth and progress must lie in technological innovation, research and development.

Aware of the need to offer to customers high quality products on an ever more crowded market, where sometime low quality and unexpensive products are offered, ACG only uses Italian technology to design its products, which are conceived in a tailor-made way, in Italy and Italy only, by specialised engineers.

## APPLICATION FIELDS



### MARITIME INDUSTRY

Commercial Vessels  
Military Vessels



### OIL & GAS OFFSHORE

Rig & Drilling  
Platform  
FLNG, LNG, FSO,  
FPSO, FRSU  
Support Vessels



### OIL & GAS ONSHORE

Cooling Towers  
Refineries  
Petrochemical Plants  
Chemical Plants  
LNG Terminals



### OFFSHORE

Wind Turbine



### INDUSTRY

Sea Water  
Processing  
Steel Mills  
Paper Mills  
Power Plants



### WATER UTILITY

Aqueducts  
Sea Water  
Desalination Plants  
Sewage Treatment



### COMMUNITY

Rural Village  
Luxury Resort  
SPA  
Sea Water  
Swimming Pools  
Disinfection

**WORLD  
LEADER**  
in the production of  
**ANTIFOULING  
SYSTEMS**



**ACG**

ITALIAN TECHNOLOGY

**OUR  
CERTIFICATIONS**



Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM  
ISO 9001



# ECOLCELL

## FIGHT MARINE FOULING ECO-FRIENDLY

*“The problems caused by marine biofouling of the sea give rise to high maintenance costs and increase fuel consumption”*

**ECOLCELL®:** the best solution for the prevention of the growth of macro and micro marine organisms that develops in sea water cooling circuits on board ships and Oil&Gas platforms. The advantages of the Ecolcell® are: eco-friendly, on-site production of the antifouling solution, long life time of anodes, fully-automated and easy maintenance.

**ECOLCELL® GIANT CHLOR:** first class for large capacity sea water. This is a large-scale electrochlorination system designed to treat big flow rate of sea water up to 30,000 m<sup>3</sup>/h, to avoid the growth of marine fouling in sea water cooling circuits on board LNG, FPSO, FSRU and FSO.

**MINIECOLCELL:** a system that generates sodium hypochlorite solution to disinfect and deodorise sewage during the sewage treatment on board ships. With this plant, there is no need to store any quantities of chemicals.

**ECOLPOOL:** an alternative chlorination system for disinfecting sea water swimming pools. ECOLPOOL uses sea water electrolysis to produce a “fresh” disinfectant solution, sodium hypochlorite, able to kill bacteria and viruses in the swimming pools.

**ECOLBRINE DESK:** a plant designed to work where no sea water is available. Starting from fresh water and salt (NaCl) it produces sodium hypochlorite on site through electrolysis, in the quantities required by the client for a proper disinfection.

**ECOLCELL BTs:** the ideal equipment for the total elimination of aquatic invasive marine organisms and all pathogen species that are loaded into the ballast tanks during ballasting. Thanks to the ECOLCELL® technology, it is possible to thoroughly disinfect the ballast water by dosing the sodium hypochlorite solution produced by the plant. During deballasting, ECOLCELL BTs discharges treated sea water without environmental impact.





# ECP [ ELECTRO CHLORINATION PACKAGE ]

## GIVE POTABLE WATER TO PEOPLE AND PREVENT FOULING

*“Over time, reverse osmosis plant membranes block due to the proliferation of marine fouling”*

**ECOLCELL SW ONSHORE:** independent system that generates sodium hypochlorite on site with cutting-edge, reliable components. This allows for the customisation of any unit to satisfy the chlorine production required and in accordance with the environmental requirements. The plant is designed mainly for on-shore use, installed in a building or ISO Hi-Cube container, with air conditioning. This compact equipment produces highly-concentrated sodium

hypochlorite by means of sea water electrolysis for:

- power plants
- coastal refineries
- waste water treatment plants
- flash-type or reverse osmosis desalination plant during preandpost treatment.
- cooling plants for industry



## MAINTAIN CLEAN FIRE-FIGHTING SYSTEM

*“Fire is the most disastrous event that can take place on board a platform”*

**ECOLCELL SW OFFSHORE:** it is an antifouling system designed for offshore applications, which prevents the growth of marine organisms in the fire-fighting circuits and water circuits, producing active chlorine locally to be injected directly into the

submersible lifting pumps and jockey pump circuit. It can be installed on:

- platforms
- jack-up drilling





## FIGHT CORROSION

*“Corrosion of the submerged steel parts is a problem to be avoided insofar as the structure during its life would be irreversibly damaged”*

**MARIMPRESS ICCP:** it is an impressed current cathodic protection system used to protect the hull of ships, floating docks and all other structures submerged in sea water from corrosion. The system adapts well to temperature changes, water salinity, ship speed, paint damages, guaranteeing excellent protection against steel corrosion. SED (Shaft Earting Device) to protect propeller shaft is available, if requested.

### Advantages of Marimpress ICCP:

- adaptability to each ship type
- most effective and total protection from corrosion
- no operating costs
- ease of installation
- automatic function (does not require any manual intervention)
- duration of titanium anodes more than 10 years
- safe and ecological

### Savings for shipowners:

- lengthens the life of the hull, rudder and propeller
- lengthens the life of the paintwork
- needs no particular maintenance
- reduces fuel consumption
- no need to replace anodes and cells for at least 10 years

**MULTIZONE MARIMPRESS ICCP:** a new generation of Marimpress ICCP system which can provide a MultiZone control. Thanks to a smart electronic technology, all status and operation of the systems are shown, especially a particular zone of the hull can be monitored remotely.





# COPRON

## FIGHT MACRO FOULING WITH IONS

*“Marine macro fouling seriously obstructs sea water pipes, resulting in high maintenance costs”*

**COPRON:** this is an antifouling/anti-corrosive system that, thanks to copper and aluminium/iron anodes, controls the settlement of marine macro fouling in the seawater pipework.

### The benefits of Copron:

- prevents macro fouling growth
- requires very low operating costs
- requires minimal preventive maintenance
- easily and unexpensively installed
- reduces costs for the cleaning and maintenance of sea water cooling circuits on board ships
- reduces fuel costs, eliminating the need to increase power because pipes are blocked
- reduces biological and galvanic corrosion of pipeworks

**COPRON REACTION TANK:** in this plant, the sea water flows into a tank fitted with copper and aluminium anodes. The antifouling solution (cuprous ions) is produced in the same tank and then injected into the sea chests.



# WORLD WIDE



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### CHINA

DALIAN - Office

GUANGZHOU - Office

SHANGHAI - Main Sales Office

CHANGSHU - Factory

## NETWORK

Brazil, China, Croatia, Denmark, Finland, Germany, Greece, Hong Kong, India,  
Indonesia, Italy, Jordan, Malaysia, Netherlands, Norway, Poland, Singapore, Slovenia,  
South Korea, Spain, Sweden, Turkey, UAE, UK, USA Teaming Agreement.

[www.acgmarine.com](http://www.acgmarine.com)