Marine pipework anti-fouling systems
ICCP hull corrosion protection systems

Specialised protection for military vessels

Cathelco
Marine pipework anti-fouling systems for naval vessels of every size

Cathelco

- Eliminates blockages in seawater engine cooling system pipework caused by barnacles and mussels.
- Range of control panels and anodes to suit vessels of every size.
- Fitted to the surface craft and submarines of over 40 navies around the world.
- Based on the electrolytic principle for effective and reliable protection.
- Requires minimum maintenance and attention from crew.
- Does not use chemicals which are harmful to the environment.

Submarines

Warships

Coastguard Vessels

Algeria  Argentina  Australia  Belgium  Brazil  Canada  Chile  China  Colombia  Denmark  Egypt  Mexico  Netherlands  New Zealand  Oman  Pakistan  Peru  Philippines  Qatar  Royal Navy  Singapore

Pictures by kind permission of the Royal Navy, Royal Dutch Navy, USS Constellation and VT Shipbuilding International.
CorrinTec
I-Shield

- Multi-zoned system for optimum corrosion protection.
- Low electromagnetic signature with ultra-low ripple power supply.
- Driven by mathematical model for greater effectiveness.
- Accurate control with ability to maintain controlling reference electrode within ±5mV of set mV point.

AluTEK
- Accurately controlled ICCP protection for aluminium hulls.
- Versatile ICCP system designed for small craft.

Reference Cells
- Choice of zinc or silver/silver chloride reference cells.
- Rubber housings for easy installation and replacement.

Thyristor Panels
- Economical control panels for a range of military applications.

Hull Anodes
- Flush mounted ‘dive changeable’ anodes which can be replaced without dry docking.
# Naval Reference List

**ALGERIA**
- 8 Fast Patrol Craft
- 2 Landing/Logistics Ships
- 1 Corvette

**ARGENTINA**
- 3 'Salta' Class Type 209 Submarines
- 2 Type 42 Destroyers Submarines

**AUSTRALIA**
- 4 'Oberon' Class Submarines
- 6 Collins Class Submarines

**BELGIUM**
- 4 Frigates

**BRAZIL**
- 6 Mk 10 Frigates
- 2 209 Type Submarines

**CANADA**
- 3 Coast Guard Patrol Vessels
- 4 Coast Guard Icebreakers
- 1 Coast Guard Survey Vessel
- 2 Training Vessels
- 1 Nav Aids Vessel
- 5 Frigates
- 3 Minesweepers
- 1 Destroyer
- 4 Type 1100s
- 1 Type 1050, NR2

**CHILE**
- 2 Leander Class Frigates
- 4 Type 22 Frigates
- 3 Type 20 Frigates
- 3 M Class Frigates
- 2 'Oberon' Class Submarines
- 1 Support Vessel

**CHINA**
- 12 Police/Customs Patrol Vessels

**COLOMBIA**
- 2 209 Submarines
- 4 Corvettes

**DENMARK**
- 3 Support Ships

**EGYPT**
- 6 Fast Patrol Boats

**FRANCE**
- 8 Multi-Mission Frigates
- 1 Support Ship

**GERMANY**
- 4 Corvettes
- 2 Frigates
- 6 Submarines

**GREECE**
- 8 'Gleiwitz' Type 1,000 Ton Submarines
- 4 Water Carriers
- 3 HDW Submarines

**INDIA**
- 4 HDW Type 209 Submarines
- 3 Frigates
- 4 Corvettes
- 2 Survey Vessels

**INDONESIA**
- 2 Type 209 Submarines
- 4 Corvettes

**IRAN**
- 4 Mk 5 Destroyers
- 4 Logistic Support Vessels

**IRELAND**
- 1 Patrol Vessel

**ITALY**
- 6 Anti-Submarine Frigates
- 2 Mezzola Class Frigates
- 1 Survey Vessel
- 1 Helicopter Carrying thru Dock
- 1 Cruiser
- 2 Destroyers

**KENYA**
- 5 Fast Patrol Boats

**KOREA**
- 4 Type 209 Submarines

**LIBYA**
- 1 Mk 7 Frigate

**MALAYSIA**
- 14 Fast Patrol Boats
- 4 Corvettes
- 2 209 Type Submarines

**MALTA**
- 1 Coastal Patrol Boat

**MEXICO**
- 31 Fast Patrol Boats

**MOROCCO**
- 1 Frigate

**NETHERLANDS**
- 2 'M Class Frigates
- 1 Fast Auxiliary (ACR)
- 4 LCF Frigates
- 4 Walrus Class Submarines
- 1 Hospital/Troop Carrier

**NEW ZEALAND**
- 2 Leander Class Frigates
- 1 Survey Vessel

**OMAN**
- 10 Fast Patrol Boats
- 2 Logistics Support Vessels
- 3 Offshore Patrol Vessels

**PAKISTAN**
- 1 Patrol Vessels

**PERU**
- 4 Type 209 Submarines

**PHILIPPINES**
- 2 Patrol Craft

**QATAR**
- 4 Fast Patrol Boats

**ROYAL NAVY**
- 10 Polaris Carrying Nuclear Submarines
- 3 'Porpoise' Class Conventional Submarines
- 3 Through Deck Cruisers
- 11 Type 42 Destroyers
- 16 Leander Class Frigates
- 20 Type 21 Frigates
- 4 Type 22 Frigates
- 17 Type 20 Frigates
- 2 Assault Ships
- 1 Air Training Ship
- 2 Special Operations Ships

**SINGAPORE**
- 2 Type 890 Submarines

**SOUTH AFRICA**
- 3 HDW Submarines
- 1 Survey Vessel

**SPAIN**
- 4 Support Vessels
- 4 BAM Frigates

**SWEDEN**
- 1 Submarine
- 4 Riken Type Submarines

**TAIWAN**
- 4 Fast Patrol Craft

**THAILAND**
- 3 Corvettes

**TRINIDAD & TOBAGO**
- 3 Offshore Patrol Vessels

**TURKEY**
- 4 Type 209 Submarines
- 4 HDW Submarines

**USA**
- Dignity (MSC)
- Cape Decision (MSC)
- Catawba (MSC)
- Narragansett (MSC)
- Mohawk (MSC)
- Observation Island (MSC)
- Kiska (MSC)
- Sioux (MSC)
- Navajo (MSC)
- USCOC Haddoock
- USCOC Terren
- USCOC Shinko
- USCOC Coho
- USCOC Armbierjack
- USCOC Cobra
- USCOC Chirlock
- USCOC Martin
- USCOC Harry Claborne (Buoy Tender)
- 4 Research Vessels
- 1 X-Craft (Seafighter)

**VENUEZUELA**
- 2 209 Type Submarines
- 4 Corvettes
- 2 Frigates
- 3 Litoral Support Vessels
- 3 Offshore Patrol Vessels

**MISCELLANEOUS**
- 1 vesper Thonycroft Tri-foiled Military
- Trimaran Experimental Vessel
- 1 British Antarctic Survey Vessel

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