



MARIMPRESS ICCP SYSTEM

Impressed Current Cathodic Protection



Marimpress ICCP

Our **ICCP** system operates by continually measuring the potential of the submerged steel surface using hull-mounted zinc reference electrodes. If the potential changes from the preset value (normally +220mV) the control panel releases a dc current to the titanium anodes.

Marimpress ICCP uses titanium anodes.

Marimpress ICCP works automatically, according to external conditions that affect the rate of corrosion, such as:

- changes in temperature and salinity of seawater ;
- Ship's speed;
- condition of the paintwork.



ICCP ELECTRIC PANEL



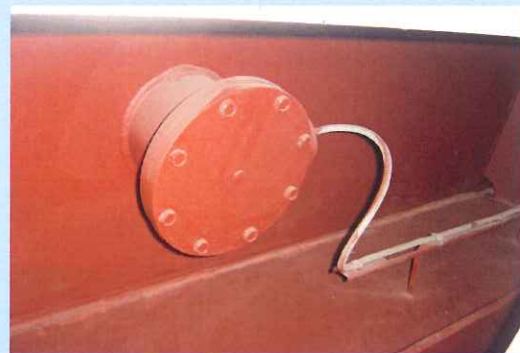
ICCP ANODE



How the system operates

Zinc reference cells continuously monitor the potential of the hull and send measurements back to the control panel, which uses high technology to calculate the correct compensating current to be supplied to the activated titanium anodes, strategically positioned on the hull surface.

If the potential starts to rise above the preset value (+220 mV for steel hulls, because at higher potentials the corrosion occurs), the rectifier supplies the correct amount of dc current to the activated titanium anodes, in order to maintain hull potential to preset value. In this way, not only the hull, but, when earthed also the rudder, propeller, shaft and stabiliser fins are completely protected from corrosion.



ICCP REFERENCE CELL



ICCP SLIPRING

The system mainly consists of three parts:

- Control panel (located in the engine room),
- Titanium anodes (strategically located on the hull),
- Zinc reference cells (located on the hull).

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