

Cathodic Protection of Ships

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Cathodic protection controls corrosion by supplying direct current to the immersed surface of the structure. This could be achieved by two main ways: using sacrificial anode or using an impressed current. The main difference between the two methods is that the impressed current cathodic protection uses an external power source with inert anodes while the sacrificial anodes cathodic protection uses the naturally occurring electrochemical potential difference between different metallic elements to provide protection. The paper's aim is to realize a comparative analysis of these methods with regard to their benefits, features and also to the economic point of view which focus on naval ship.