**Cathodic Protection as a corrosion prevention method in chemical and marine industries**

**Abstract**

The study was carried out to show how cathodic protection can be used to protect steel plate as an alternative to corrosion prevention method in a chemical or petrochemical industries and marine environment. Cathodic protection was carried out in the laboratory by dipping two metal plates one protected and the other unprotected in a solution of 4% NaCl. At intervals of time (days), the unprotected steel corroded with deposit of brownish iron III chloride and the protected steel did not corrode. The weights of the protected and unprotected steels before the experiment (corrosion) were both 179 g, and after the experiment were 176 g and 162 g respectively. The study showed that corrosion rate is inversely proportional to concentration of the electrolyte and time; and, the graph of voltage versus time revealed that the voltage of unprotected steel decreases sharply while that of protected steel decreases slightly.