
Corrosion Control series This is the first of a series of monographs on practical aspects of corrosion control, under the general editorship of L. L. Shreir, PhD, FRIC, FIM, FICorrT, FIMF, editor of the standard reference work Corrosion. Metallic Coatings for Corrosion Control V. E. Carter, F I C o r r T , F I M F. NEWNES-BUTTERWORTHS. Corrosion Control for Buried Pipelines. Corrosion Research and Testing. For more information on corrosion research and testing contact Gareth.hinds@npl.co.uk Or visit our website: www.npl.co.uk/electrochemistry.Â By acting as a focal point for corrosion enquiries the NCS can make the UKâ€™s entire base of experts available to solve problems or can use in-house expertise or teams to carry out consultancy.Â Protection of metallic materials against corrosion - Corrosion likelihood in soil Cathodic protection for submarine pipelines Cathodic protection for fixed steel offshore structures Internal cathodic protection of metallic structures Cathodic protection of steel in concrete Cathodic protection of buried or immersed metallic structures. A. Metallic coating The structure is coated with a layer of other metal which may be more noble than the structure or less noble than it e.g. steel structures can be coated with copper which is more noble than steel or zinc which is less noble. In case of coating the structure with a more noble metal care should be taken that the coat is free from pores or cracks to avoid the formation of dissimilar metal corrosion cells which would lead to corrosion of the structure. Factors that must be considered in selection of a coating metal: 1. The coating should be able to resist direct attack of the e