A NOTE ON THE MODELING OF CORROSION RATES OF MILD STEEL, MEDIUM CARBON STEEL, BRASS AND ALUMINUM

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ABSTRACT

Results of earlier corrosion experiments on mild steel, medium carbon steel, brass and aluminum exposed to the laboratory atmosphere and 0.1M solutions of sodium chloride, ammonium hydroxide and hydrochloric acid were used to obtain second order regression equations of corrosion extents for varying exposure times. In the present study expressions for corrosion rates are derived from the regression equation obtained for each experiment. The corrosion rates are useful in determining how fast corrosion takes place at any given instant of exposure time, within the limits of experimental values.

Keywords: Corrosion rate equations, Steel, Brass, Aluminum.