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Corrosion Behaviour of 304 and 316 Austenitic Stainless Steel in Strong Sulphuric Acid

Joeeta Mukherjee Ghosh
Assistant Professor
Dr. C. V. Raman University, Kota, Bilaspur, C.G, India

Abstract: *The sample of 304 and 316 austenitic stainless is characterized by Potentiate to determine the degradation rate and polarization resistance in the higher concentration of strong sulphuric acid. Results and analysis indicate an increase in corrosion rate (mm/year) with respect to the concentration of acid media for both samples. It has been observed from the overall result, 316 stainless steel is more favorable as compared to 304 due to better polarization resistance. It has found around 316 spotless, the cathodic polarization expanding with expanding in the grouping of H2SO4 corrosive. In by and large consequence of this study in light of an investigation, potentiating shows the 316 hardened steel is more ideal than 304 in a higher grouping of sulphuric corrosive because of good polarization opposition. The magnificent polarization obstruction of 316 tempered steel in the solid corrosive media might be expected high rate (Cr and Ni) alloying component which help to shape an oxide layer on the metal surface. It helps in the arrangement of concentrated corrosives.*

Keywords: Stainless Steel, Polarization, Corrosion, Degradation, Potentiate, Sulphuric Acid

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