عنوان مقاله:

Effective Factors on The Cathodic Disbonding Behavior of Solvent Free Glass Flake Epoxy Polyamine and ۱۰۰% Solid Aromatic Polyurethane Coatings

محل انتشار:

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خلاصه مقاله:

The influences of coating thickness, applied potential, immersion time in NaCl solution, concentration, temperature and pH of NaCl solution on the cathodic disbonding behavior of solvent free glass flake epoxy polyamine and ۱۰۰% solid aromatic polyurethane coatings were investigated. The results of studying coating thickness and immersion time in NaCl solution showed that the diffusion mechanism of water, oxygen and sodium cation for polyurethane and epoxy coatings were through the intact coating and defect in coating, respectively. The cathodic disbonding radius was inversely proportional to applied potential. The cathodic disbonding area increased with increasing NaCl concentration in the range ۳.۵ to ۵%, while it decreased from ۷ to ۹%. It was also found that an increase in the temperature and pH .of NaCl solution reduced the cathodic disbonding rate of the coatings

کلمات کلیدی:

Cathodic Disbonding, Effective Factors, Diffusion Mechanism, Pipeline Coating, Solvent Free Glass Flake Epoxy ,Polyamine, ۱۰۰% Solid Aromatic Polyurethane

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