

عنوان مقاله:

The effect of Nanostructured vanadium-based conversion treatment on the cathodic disbonding and corrosion resistance of epoxy coated mild steel

محل انتشار:

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خلاصه مقاله:

The cathodic disbonding and adhesion performance of an epoxy coated on steel were investigated using vanadium-based conversion coating (VCC). The obtained results indicated that the vanadium conversion layer improved the cathodic disbonding resistance of the epoxy coating significantly. The electrochemical impedance spectroscopy (EIS) was also confirmed the results. Atomic force microscopy (AFM) was carried out to examine the surface topography. Surface roughness was also changed. The performance may be attributed to the formation of nano-sized particles on the steel containing vanadium oxides/hydroxides compounds

کلمات کلیدی:

Nanostructured vanadium-based conversion treatment, Mild steel, Cathodic disbonding, EIS , AFM

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