

MECHANICAL AND CORROSION RESISTANCE PROPERTIES OF NANO TiO₂ REINFORCED NI COATINGS

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ABSTRACT

TiO₂ is in great choice for the generation of composite coatings on steel, due to its increasing availability and to the fact that TiO₂ can reinforce into electroplate to improve the mechanical properties and other properties such as magnetic and photocatalytic properties etc [5].

In this context, the aim of this work is to investigate the influence of the nature and concentration of nano particles on the corrosion resistance of the composite films plated on steel substrate by the electrochemical by polarization curves and non-electrochemical methods wear resistance, SEM, XRD studies were conducted to analyze the properties.

KEYWORDS: Mechanical and Corrosion Resistance Properties of Nano TiO₂ Reinforced Ni Coatings, SEM, XRD Studies