

عنوان مقاله:

Incorporation of nano-particles for improvement of corrosion characteristics of nickel plating

محل انتشار:

نخستین کنگره بین المللی نانوفناوری و کاربردهای آن در صنایع نفت، گاز و پتروشیمی (سال: ۱۳۸۵)

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خلاصه مقاله:

The advantages of Ni plating include excellent corrosion resistance, solderability, and low porosity. But in special cases the improvement of these properties seems necessary. This improvement can be achieved by adding nano-particles to the coating to form a composite nano particle. In this study the effect of most important nano-particles to improve corrosion resistance and surface hardness of Ni coatings has been discussed. The incorporation of nanoparticles resulted in improvement of surface hardness and corrosion resistance characteristic of the plates. The morphology of alloys and nanocomposite coatings were observed using scanning electron microscope (SEM).
.In all cases the morphology of nanocomposite is smoother than that of alloy coating

کلمات کلیدی:

Nano composite coating, Electroless plating, Electroplating, Hardness, Corrosion resistance

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