عنوان مقاله:

Effect of Deposition Regime on Tribological Behavior of VK۸Coating on ۱.۲۳۴۴ Tool Steel Obtained by Electro Spark Method

محل انتشار:

فصلنامه مواد پیشرفته و فرآوری, دوره 1, شماره 2 (سال: 1392)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

In this study, the effect of deposition regime on the wear behavior of VK۸ coating applied to ۱.۲۳۴۴ tool steel by electro spark method (ESA) was investigated. After sample preparation, the coating with high and low regime was applied. To assess the wear behavior, the pin on disk test method according to ASTM G۹۹-۰۴, was used. For surveying surface morphology and cross section of the coating as well as the substrate, optical microscope and SEM were used. Also for phase evaluation of the coating, X-ray diffraction (XRD) was used. The results show that the imposed regime is very impressive on the thickness of coating and wear resistance. In low regime, less porosity, better finishing surface .and lower coating thickness was achieved. In this regime, better wear resistance was obtained

کلمات کلیدی:

Electro spark alloying, Electro spark deposition, Tungsten carbide coating, VK۸, ۱.۲۳۴۴ Hot work tool steel, Pin on disk test method