

عنوان مقاله:

Effect of Aluminum on Microstructure and Thickness of Galvanized Layers on Low Carbon silicon-Free Steel

محل انتشار:

مجله ی بین المللی انجمن آهن و فولاد ایران، دوره 6، شماره 1 (سال: 1388)

تعداد صفحات اصل مقاله: 5

نویسندگان:

N. Parvini Ahmadi - Faculty of Materials Engineering, Sahand University of Technology, Tabriz, Iran

E. Rafiezadeh - Faculty of Materials Engineering, Sahand University of Technology, Tabriz, Iran

خلاصه مقاله:

In hot dip galvanizing, several parameters such as chemical composition of coating bath, immersion time and surface roughness of specimens could affect microstructure and properties of coating. In this article, the effect of aluminum content, immersion time and surface roughness on structure and properties of alloy layers have been investigated. Specimens of low carbon silicon-free steel with different surface roughness were galvanized in pure zinc bath and bath containing various amounts of aluminum for different times. It was found that the morphology of deposits was changed from layered to columnar state when ۰.۰۲۵wt%Al was added into coating bath. By increasing Al content up to ۰.۰۵wt%Al the adherence of the layers was improved but these thicknesses were decreased due to reduction of diffusion rate.

کلمات کلیدی:

Hot Dip Galvanizing, Aluminum, Alloy layers

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1796187>

