

عنوان مقاله:

Effects of fluxing operations on the properties and microstructure of LM2 alloy

محل انتشار:

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خلاصه مقاله:

Metal quality depends on three factors: 1. Control of rare earth elements 2. Reduction in dissolved hydrogen and deletion of inclusion 3. Deletion of non-metallic impurities Impurities in alloys aluminium alloy reduces mechanical properties by increasing porosity because it increases tend to corrosion. Non-metallic impurities also reduce the toughness of aluminium alloys and act as increaser of stresses and early fracture. In this paper, the commercial flux of powder 11S3 coverall is added to the molten LM2 alloy⁴ from returned melting of LM2 alloy and LM2 ingots and the effect of temperature of fluxing and the amount of flux on the efficiency of the filtration process investigated through the pull tests, measurement of density, metallography and SEM⁵. According to the results, by increasing the amount of flux and heat of fluxing, at first filtration efficiency increases and then decreases. Ultimately, optimum amount of .applying flux and the optimum temperature would be determined

کلمات کلیدی:

LM2 alloy, fluxing operation, fluxing temperature, coverall fluxing

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