

عنوان مقاله:

EFFECT OF BORON AND EXTRUSION PROCESS ON THE MICROSTRUCTURE AND TENSILE PROPERTIES OF INSITU Al-20wt.% COMPOSITE

محل انتشار:

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خلاصه مقاله:

In this research, the effects of B addition and hot extrusion on the microstructure and tensile properties of an in-situ Al-20 wt.% MgSi composite have been investigated. Adding 0.5 wt.% B to the composite reduced the average size of MgSi primary particles from 70 μm to 45 μm . Hot extrusion was carried out at 480, with ratio of 12:1 and ram speed of 1mm/s. Further refinement of primary MgSi particles was observed after applying hot extrusion process. The observed increase in tensile strength and elongation values of the Al-20 wt.% MgSi composite was due to the .microstructural refinement after hot extrusion process

کلمات کلیدی:

Boron, Hot extrusion, Composite, Modification

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