

## عنوان مقاله:

effect of welding parameters on microstructure and mechanical properties in dissimilar friction stir welding between magnesium and aluminum alloys

## محل انتشار:

کنگره بین المللی جوش و روشهای اتصال (سال: 1388)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

dissimilar friction stir welding FSW between magnesium alloy AZ31 and aluminum alloy 1100 plates with 3 mm thickness was studied . Fusion welding of aluminum /magnesium alloys has failed because of forming much more intermetallic compounds by using FSW the amount of intermetallic compounds significantly reduced in this study different samples obtained by employing rotating speeds ranging from 300 to 1000 rpm and welding speeds ranging from 10 to 50 mm/min. the welds were also formed when the stirring pin was off the centerline to AZ31 OR TO Al1100 . mechanical properties of the joints were evaluated by means of hardness and tensile tests at room temperature. .microstructure of the welds was examined by using opticalmicroscope and x-ray diffractometer

## کلمات کلیدی:

dissimilar friction stir welding , aluminum alloy , magnesium alloy ,mechanical properties ,microstructure

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/163994>

