

## عنوان مقاله:

Closed-cell aluminum foam manufactured by accumulative roll-bonding and friction stir processing

## محل انتشار:

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## نویسندگان:

J. M. Milani - Faculty of Materials Engineering, Sahand University of Technology, Tabriz, Iran

T. Saeid - Faculty of Materials Engineering, Sahand University of Technology, Tabriz, Iran

## خلاصه مقاله:

Two manufacturing routes of accumulative roll-bonding (ARB) and combination of friction stir processing (FSP) and ARB was compared to production of closed-cell aluminum foams. Titanium hydride powder as foaming agent was distributed inside 1100 aluminum sheets through ARB and then FSP trials were conducted. Optical microscopy and densitometry measurements, revealed different agglomeration level and distribution of titanium hydride particles in two manufacturing routes before heat treatment. As a result, different porosity was obtained in two methods after gas releasing. Moreover, it was found that FSP modified the distribution of titanium hydride powder and therefore resulted in an improved foam structure

## کلمات کلیدی:

Aluminum Foam; Accumulative Roll Bonding; Friction Stir Welding

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/690182>

