Study Of The Hot Deformation Parameters On The Superplastic Behavior In Coarse-grained A6061 Aluminum Alloys

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ABSTRACT

By superplastic forming, the workpiece with complicated shape can be produced by one batch processing thus the processing costs resulted from traditional processes such as cutting processing, thermal treatment, plastic processing and bonding can be eliminated while achieving products of high precision. So far there have been cases of successfully produced components and parts based on this technology for the applications of aerospace and automobile industries among foreign countries, such that it has become one of the most important precision processing technologies. The majority of superplastic materials for aluminum are in the categories of fine grained (

Keywords : Aluminumalloys、Coares-grained、Dynamic recrystallization、Superplastic forming、High temperature deformation

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