

## عنوان مقاله:

Genetic algorithm optimization of the milling parameters on the surface roughness of nickel-based superalloy

## محل انتشار:

هفدهمین همایش ملی و ششمین کنفرانس بین المللی مهندسی ساخت و تولید (سال: 1399)

تعداد صفحات اصل مقاله: 4

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## خلاصه مقاله:

Inconel 718 is a difficult-to-cut material that is widely utilized in high temperature, and corrosion resistant environments due to its superior physical and mechanical properties. Surface roughness is one of the most significant considerations in evaluating the machinability of materials in machining processes. Four milling parameters such as feed rate, cutting speed, axial and radial depth of cut are chosen as input and surface roughness chose as an output parameter. The regression model has been specified as the fitness function of the genetic algorithm then it is utilized to find optimal conditions. This research showed that the genetic algorithm is a powerful method to find minimum surface roughness.

## کلمات کلیدی:

Nickel-based superalloy, Genetic algorithm (GA), Optimal cutting parameters, Milling

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1278102>

