

## عنوان مقاله:

Analyzing Mechanical Properties of Cr Alloyed Sintered Steels Using Response Surface Methodology

## محل انتشار:

اولین همایش بین المللی و ششمین همایش مشترک انجمن مهندسی متالورژی ایران (سال: 1391)

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## نویسندگان:

A. A. Azadbeh - *Department of Electrical Engineering, Shahed University, P.O. Box ۳۳۱۹۱۱۸۶۵۱, Tehran, Iran*

A Mohammadzadeh - *Department of Materials Engineering, Sahand University of Technology, P.O. Box ۵۱۳۳۵-۱۹۹۶, Tabriz, Iran*

M. Azadbeh

M. Dokhantchi - *Mechanical Engineering Faculty, Azarbaijan University of Shahid Madani, Tabriz, Iran*

## خلاصه مقاله:

In this study an experimental investigation by using response surface methodology (RSM) has been undertaken in order to model and evaluate the mechanical properties of Cr-Mo alloyed sintered steels with respect to the variation of powder metallurgy process parameters such as compacting pressure, sintering temperature and alloyed steel powder with different Cr content. Mathematical models were developed to predict the mechanical properties such as transverse rupture strength, apparent (= macro-)hardness and impact energy. To achieve desired properties, the effects of the various manufacturing parameters have to be characterized and optimized as well. The developed mathematical models would help to predict the variation in mechanical properties in a wide range with the change in the mentioned manufacturing parameters. The obtained mathematical models are useful not only for predicting the mechanical properties by higher precision but also for selecting optimum manufacturing parameters to achieve the desired properties

## کلمات کلیدی:

Powder metallurgy, Cr alloyed sintered steels, response surface methodology, mechanical properties

## لینک ثابت مقاله در پایگاه سیویلیکا:

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