

## عنوان مقاله:

Study on the Effect of Miniaturization of Machine Tools on the Dimensional Surface Error in Peripheral Milling

## محل انتشار:

دهمین کنفرانس ملی مهندسی ساخت و تولید (سال: 1388)

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## خلاصه مقاله:

In this paper, comparisons are made between the dimensional surface error of workpieces under peripheral milling with helical end mills, machined by a conventional size milling machine and by a desktop size milling machine. The effect of size miniaturization on the quality of the finished surface is studied. It is assumed that for both machines, the machining conditions are equal and the same tool is used. Separate formula are presented to evaluate the tool and machine static deflections. Dimensional analysis is used to study the effect of downsizing on the model parameters. Moreover, an experimental method is presented to be used for this comparison. Simulations are carried out to implement this method for a milling machine with real parameters

## کلمات کلیدی:

Desktop Machine Tools-Milling-Surface Error-Dimensional Analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

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