The effect of the borehole diameter on the machining times in hard machining

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When selecting the optional parameters in machining inner cylindrical surfaces the diameter of a borehole cannot be ignored. Also in finish precision machining, when fulfilling strict accuracy and surface quality parameters economically, it was presumed that the size of the borehole diameter has got an effect on the machining times of different procedures. Five different hard machining methods are compared here on the basis of time consumption. The common characteristic feature of the comparative investigations of different hard machining procedures is that their benchmark is always the traditional grinding. This time, too, that has been chosen. It is presented how the borehole diameter influences the machining times and the most economical procedure is proposed to be selected for given borehole diameter.

Keywords: hard machining, machining time, procedures

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