

## Identification of machinability of ceramic materials by turning

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**Paper deals with the machining of super-hard ceramics by turning. The introductory part deals with analysis of used ceramic materials and their use in technical practice. Since it is a very hard technical ceramics and particularly resistant material, at present, is increasingly used to produce components that ensure long life and particularly high resistance, even in aggressive environments where metal materials can no longer be used. Products from ceramics are pressed and sintered directly to the desired shape, but in some cases they have to be machined, which technically can cause a problem. The aim of the experimental part is selection of suitable cutting insert, determining of cutting conditions that would ensure the productive machining of given ceramics. Work may serves as a troubleshooting support for machining ceramics.**

**Key words:** Industrial ceramics, diamond cutting disc, super-hard materials.

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