Taylor Equation of Durability and Its Modification

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Recent development of the application of new kinds of material in transport and production technology places higher requirements on the technologist at the determination of cutting conditions. The assortment of recent kinds of cutting material enables to intensify cutting conditions while maintaining acceptable tool durability. The dependence of tool durability on cutting speed, or „basic law of machining", is the basic means to determine tool durability at selected cutting conditions. The paper contains a suggestion to modify the original Taylor equation on recent conditions of productive machining.

Keywords: Machining, tool life, tool wear, sintered carbide

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