

SOME RESULTS OF ANALYSING THEORETICAL CUTTING MODELS

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Zvorykin and Merchant cutting models are considered, complemented with theoretical Reito developments and results of analytical and experimental Oxley investigation. In order to estimate their adequacy and choose the most correct model the data of comparative analysis of the models in question and their combinations with experimental results described by traditional empirical relationships in the form of exponential dependences with a set of table coefficients are presented. Ways to improve the compliance of theoretical models with actual physical phenomena that accompany the cutting process are proposed.

Theoretical and experimental cutting models, cutting parameters, comparison of models.

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