

EXPERIMENTAL STUDY OF FRICTION COEFFICIENT IN ORTHOGONAL MILLING

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Abstract: Many works have analysed the sensitivity of numerical models in relation to friction. The experimental study of these parameters has great complexity, therefore turning has been studied and the results have been made applicable to milling. The present work shows the procedure used for the study of the friction coefficient in orthogonal milling, by means of a rotating cutting-force dynamometer. Signal filtering is one of the main items approached, in order to reduce the dynamic system problems. It has been verified how the friction is sensitive to the instantaneous chip thickness and cutting speed.

Key words: Orthogonal milling, friction coefficient.