

## Effect of the processing materials on the ploughing force values

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**In micro cutting it is necessary to control the cutting tool. Monitoring of cutting tools is usually accomplished by measuring cutting forces. In order to improve the accuracy of monitoring it is required to consider the ploughing forces. The ploughing forces substantially depend on the processing materials. This article describes the investigation of the effect of processing materials on the ploughing force values. The extrapolation method on zero cut chip thickness was used to determine the ploughing forces. The experiments were performed by cutting of aluminum alloys, structural steels, bronzes and stainless steels.**

**Keywords:** ploughing force, monitoring, micro cutting.

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