The Proposal How to Make the Basic Machining Technologies - Turning, Milling, Planing - More Productive

Karol Vasilko, Zuzana Murčinková
Faculty of Manufacturing Technologies, Technical University of Košice, 080 01 Prešov, Bayerova 1, E-mail: karol.vasilko@tuke.sk, zuzana.murcinkova@tuke.sk

The current manufacturing production is characterised by increasing level of automation, emerging of the new light-weight and high-stiff materials that are technologically difficult to produce. These trends have significant impact on production productivity. The automation has brought significant reduction of non-productive time (fast workpiece and tool exchange, automatic control of product quality during technological process). In this situation, the machining time becomes the limiting factor. In present, the reducing of the machining time is possible to make only by either significant changes in conventional technologies or application of new technological principle. However, these secondary solutions in some production section are not sufficient because it requires a global solution. An example of un-equal time continuity in link production is fact that one pressing machine with the time per one piece in seconds can supply dozen of lathes with the time per one piece in minutes. The paper provides also the proposal to the productivity increase of critical technologies as turning and milling.

Keywords: productivity, machining time, technology, automation, product, material

References