

Theoretical and Practical Relationship $R_z = f(f; r_\epsilon)$

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Development of methods for machined surface identification has reached a stage when real surface shape can be visualised more precisely. Mechanical tools for measuring roughness have shown misrepresented profile considering the fact that the tip of diamond sensor is not „ideally sharp“, it only follows the outline of actual profile. Profile details can be followed by optical scanning. During observation of profile records and theoretically defined rounded tool tip copying considerable disproportions can be found. This fact leads to incorrect determination of feed with defined value of R_z and selected tool tip radius in practice. The aim of the paper is to identify the reasons of such differences and suggest a process of their elimination.

Keywords: machining, shift, machined surface

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