# Surface integrity of hardened bearing steel after milling

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**Demands on a surface layer quality of machined components are still increasing with increasing of machining productivity. Changes of mechanical properties in the thin surface layer of a workpiece occur due to thermal and deformation effects of the cutting tool during machining. The aim of the present paper is a study of the surface layer of samples from hardened steel (14th grade of steel), which were milled using machines produced by TOS Varnsdorf a.s. The samples were milled with different tools from five manufacturers. Parameters of surface integrity, which comprehensively reflect the quality of surface layer after milling, were evaluated after the machining.**

**Keywords:** metal cutting, milling of hardened steel, surface integrity, measurement

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