

Analysis of geometric accuracy of turned workpieces

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Each construction of cutting machine tool activates geometric inaccuracies of the workpieces as a result of different stiffness of its joints. The acting of cutting force and the moving of its position leads to the deformation of the elastic joints of cutting machine tool and the elastic deformation of the workpiece appears. The aim is to maintain geometric modifications of the workpiece in required tolerances. The paper tries to identify these inaccuracies for case of a centre lathe.

Keywords: turning, tool, lathe, measurement, accuracy

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