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Simulation of Ball Bearings Static Structural Analysis

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Abstract. FEM analysis is a very efficient method for achieving results of stresses at different loading conditions according to forces and boundary conditions applied to the component from the static analysis. The purpose of the study was to collect data's using two different software and after to compare them with mathematical results. This work aims at analysing the behaviour of the ball bearings under a static load, with Solidworks, ANSYS and MESYS software. The comparison was done between the analytical results using the Hertzian theory, ANSYS and MESYS, for two different cases of loading.