

## Design of Double-row Magnetic Cycloid Gearbox

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The paper deals with the issue of magnetism and its use in mechanical engineering as well as in other industries. Transmission systems are rather frequently present in almost every technical system. The purpose of each transmission system is to transform energy, based on which its quality can be assessed.

The main objective of this paper is the structural design of a magnetic cycloid gearbox, a detailed description of transmission kinematic analysis, elaboration of calculation models for FEM analyses consisting of the analysis of gearing power relations and calculation of maximum torque the gearing is able to transform.

**Keywords:** magnetic transmission, kinematic equations, stress analysis, gearset, cycloid gearbox

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