Annotation

In this thesis, explanations of the traction motor were made, as well as groups and types of engine were considered. Calculations are made for the equations of the diameter of the armature of the traction electric motor, transmission parameters. I calculated the electromagnetic calculations and the number of grooves, size of conductor, number of grooves and teeth on the traction motor, the determined length of the armature and the magnetic flux, calculated magnetic voltage in a magnetic field plots.

In the following sections we calculated the influence of the anchor response, compensation actions magnetization of the armature, the conditions of calculating the cross sections of magnetic circuits, calculation of parameters of the main poles, additional poles and switching parameters. Consider the definition of efficiency and listed the characteristics of the traction motor by paarameters and made calculations.

In the economic calculations section, I calculated the capital cost of a traction engine, operating costs, and energy costs, and determined the efficiency of capital investment.