SUMMARY

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Qualification master's work entitled "Research operational characteristics of multi-edge cutting milling on the base of the main motion spline milling machine development."

Master's thesis contains: 208 pages, 96 formulas, 23 tables, 30 Figure 4 applications, 18 sources of literature. Graphic part is 12 sheets of A1 size.

Master's thesis deals with the theoretical generalization and solving the problem of creation (modernization) of spindle drive main motion spline milling machine design to provide the performance, accuracy and stability during processing.

The aim is to increase productivity in the processing and spline milling due to modernization over the main traffic spindle.

Object of study: The object of study of this work is spline milling machine.

Subject of the study: The study examined the characteristics of the regime is using many edge cutting tools milling about the main motion is spline milling machine.

Methods: To achieve this goal in the used numerical method, probability theory and mathematical statistics.

The paper analyzes the equipment used to identify the most sustainable solutions for their further implementation in machine research, the new constructive scheme of the machine is developed.

Basing on the research the identified key parameters of the spline milling machine working operation characteristics are defined.

The research work contain the graphical material and the explanatory note. Graphic material contains all the necessary design work and technological adjustment. The explanation note gives all the necessary research, technology, engineering and economic calculations.

Keywords: machine, spindle, performance, accuracy, spline groove, cutting conditions.