

Annotation

In this thesis project, for upgrading to a co-current draw bench VPC 3-4 / 550, proposed drawing machine control system with stabilization counterstrain wire during the drawing. Calculated and selected of the power of the drive motors in accordance with a predetermined route and force parameters of drawing. Developed the structural and the virtual model of the drive, which was studied in MatLab environment. Research on the model showed that the proposed system is stable and satisfies the requirements of the technological process in the mill operating modes.

In the life safety is given the working of the drawing room description and analysis of plant labor conditions for its staff. Also provides a detailed calculation of the heat balance for summer and winter periods, and solves the problem of normalization of microclimate in the work area.

In the economic part of the given feasibility study for the modernization of the drawing machine, proving its efficiency by increasing productivity.