SUMMARY

The diploma project contains: pages - 97, figures - 50, tables - 8 graphic part on 3 sheets A1.

In the diploma project the research of operating modes of the belt conveyor is executed. An analytical inspection of the structure, traction element and speed and torque control systems was performed. The basic requirements for the electric drive of the belt conveyor were formed.

Calculations of the L-shaped substitution scheme, synthesis of the speed regulator and reduction of the total moment of inertia are carried out.

The study of the characteristics of the dynamic mode of operation of the electric drive of the conveyor at variations of the cargo flow in the range from $M_c = 0.4 * M_n$ to $MS = 1.1 * M_n$.

The analysis of the received results of researches is executed.

BELT CONVEYOR, SUBSTITUTION SCHEME, SPEED REGULATOR, FREQUENCY CONTROL, DIRECT VECTOR CONTROL, CONVEYOR DRIVE, VARIATOR VARIATION