ABSTRACT

Thesis is presented in 52 pages, it contains 2 applications and bibliography of 17 references. There are 8 images and 1 table in the thesis.

The work is devoted to the development of mathematical and software for forecasting the indicators of the volume of production of drainage systems.

In the work the analysis of existing mathematical methods and models of forecasting is carried out, an overview of modern production planning systems is made.

In order to solve the problem, regressive methods are chosen, namely multi-factor regression.

The automated system, which was implemented at Betonica LLC (Novoyavorivsk, Ukraine), was developed.

An automated system implementing the chosen method is developed. This software provides additional possibilities: to save the file with the result of the forecast on the computer, to generate a schedule of dependence of orders volumes from the time of year. The testing of the developed system is carried out.

Keywords: forecasting, production planning system, regression model, exponential smoothing method, surface drainage system and drainage system.