

Abstract

The degree project is executed on " automation of the process of production of nitric acid", the project consists of an explanatory note on page and 3 sheets of drawings. Explanatory note: includes installation drawings nitric acid, the object of control, its flow diagrams and pictures of its static characteristics, block diagram of control system. The project also includes 3 a1 drawings, including functional automation scheme, the scheme of principle electrical signal and lock assembly and the circuit switching zyednan remote control system, emergency protection and technological lock motors. appendix includes listing of programs for the construction characteristics of the object management and control system synthesis.

The project aims to develop automation installation condition for normal functioning of the process in compliance with all parameters properly and to obtain maximum nitric acid concentration.

In the diploma project was developed nonlinear model autoclaves to find optimal control, based on which analysis of transients in a closed system with a PI-regulator.

Key words: nitric acid, automation, PI-controller, control system.