

Abstract

The degree project is executed on "Automating the process of evaporation in the production of nitrile acrylic acid", the project consists of an explanatory note on 67 page and 3 sheets of drawings. Explanatory note: includes installation drawings acrylonitrile, the object of control, its flow diagrams and pictures of its static characteristics, block diagram of control system. The project also includes 2 A1 and 1 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. Addition includes specification to scheme of automation.

The project aims to develop automation the process of evaporation for normal functioning of the process in compliance with all parameters properly and to obtain maximum acrylonitrile concentration.

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

Key words: acrylonitrile, automation, PI-controller, control system.