

Abstract

Bachelor's degree project on the theme: «Automating the process of sewage» includes an explanatory note Capacity 82 pages, the specification for functional circuits Capacity 11 pages, the specification for the electrical circuits and applications Capacity 17 pages.

Explanatory note contains 6 chapters, 3 appendix and 10 references.

Bachelor's degree project in the analysis process flow chart water purification, as the object of automation. The functional diagram for automating this process and is essentially an electrical circuit, remote control, emergency protection and technology block.

In operation the distillate of the refrigerator, as objects of control. For the same apparatus the mathematical models of static and dynamic modes. With these models, calculations of static characteristics of disturbance and control channels. Done synthesis of analog and discrete control system. In the same section, conclusions and recommendations on the use of certain regulators.

Also calculated the reliability of circuit design evaluation of quality control distillate and safety issues in the process of sewage treatment.

In the performance diploma methods were used control theory , reliability theory, mathematical modeling.

Keywords: distillate, reflux, distillation, rectification, refrigerator distillate loop control scheme automation, mathematical model, static characteristics, channel disturbance, channel management, dynamic characteristics , safety, specification of equipment