

## Abstract

The bachelor's graduation project executed on theme «Automation of acetylene purification», contains 110 pages of explanatory notes, 29 illustrations, 3 tables, 1 app, 4 drawings and 11 bibliographic items.

It was executed the scheme of automation of the process and calculated straitened device for an outline measuring consumption of the water. It was also created a mathematical model of dynamics and static process of absorption in the scrubber. It was done settings of controller by different methods and found optimal parameters of control. It was viewed the algorithm of injury prevention in the manufacturing.

It was also developed the scheme of automation, the principal electric scheme of remote system motors' control, emergency protection and technological locks (format A2), the principal electric scheme of system emergency protection and technological locks (format A2), the construction and switching scheme of system remote system motors' control, emergency protection and technological locks (format A2).

Key terms: ACETYLENE, SCRUBBER, ABSORPTION, AUTOMATION, CONTROL, MODELING, OPTIMIZATION, CONTROLLER, FLOWMETER.