INTRODUCTION OF INDUSTRIAL CONTROL VALVES AT THE DEFECOSATURATION STATION

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Abstract:

The use of automatic industrial control valves makes it possible to maintain the technological process of the defecosaturation station in a preset mode. With the help of a tracking actuator, the valves support the automatic control loop. The ratio diffusion juice - lime milk with correction on milk density; ratio diffusion juice - return of juice of I (II) saturation or suspension of juice of I (II) saturation; temperature of juices; pH of predefecated, defecated, first and second saturation juice; process of blowing from sand of pre-defecator, defecator, saturates; pressure and flow rate of saturation gas. The liquid level control device, based on the received mismatch of the control action and the signal from the liquid level sensor, forms the action coming to the input of the pneumatic actuator control device. In the work the technology of regulating valve selection based on static characteristic analysis of the regulating object is offered, where it is shown that for valve size selection by equations of flow and throughput characteristics, the valve operation is considered separately from the regulating system operation. Experimentally investigated the behavior of the object with a regulating organ to determine the valve size. However, there are many cases when direct access to the actuator is difficult or the process requires manual control of the actuator. We have developed electropneumatic tracking actuators with remote control system to solve such problems. It can control one or several actuators in the form of a cylinder with a sensor. This solution offers the highest degree of protection for the control elements and allows the air preparation system, manual override module and indication means to be located in the cabinet as required.

Key words: technological process, mode, valves, automatic regulation, diffusion juice, lime milk.