Control for a multi effect distillation(MED) desalination

박철주, 양대륙*
고려대학교
(dryang@korea.ac.kr*)

This study describes the development and application of a control strategy for multi effect distillation plant with 8 effects using advanced commercial software Aspen Dynamics™. We considered from three kinds of aspects. That was the view of energy, productivity and process stability. In order to guarantee the minimum per production cost and keeping the process stability, it is important to control and optimize the plant. Thus, the following three main control loops were set up on this plant: inlet seawater flow control loop, inlet steam flow control loop, each per effect pressure control loop. We have designed the conventional feedback control on multi effect distillation simulation. Simulation results of the control system behavior during operation of the plant are presented.