

Advanced control strategy for gasifier in an IGCC power plant

이효진, 이재형*
한국과학기술원
(jayhlee@kaist.ac.kr*)

Model Predictive Control (MPC) had been applied to various process industries as an efficient way to solve complex constrained multivariable control problem. In this study, a MPC algorithm is implemented to control the entrained-flow gasifier of IGCC power plant. The Shell gasifier model is used a typical model for an entrained-flow gasifier and the sensitivities of control variables for the Shell gasifier operation is analyzed. The load acceptance test and disturbances tests are considered.