Abstract

In this paper optimal control for two interacting conical tank process (TICTP) was designed. The optimal control is obtained by LQG solution with optimal Kalman filter. This paper describes the theoretical base and practical application of an optimal dynamic regulator using model based Linear Quadratic Gaussian (LQG) control design for nonlinear process. This LQG regulator consists of an optimal state-feedback controller and an optimal state estimator. In this
case, a performance criterion is minimized in order to maintain level of the water in both tanks.

References


Index Terms

Computer Science

Applied Sciences
Keywords
Linear Quadratic Gaussian Controller; Kalman Estimator; Two Interacting Conical Tank Process; Mimo Nonlinear Process.