Abstract

PID controller has been designed based on neural network using Back Propagation (BP) algorithm. NNPID controller output is applied to Pressure control in a tank. A Neural Network weights are equivalent to PID controller parameters and NN adjusts the weights based on the operational status of the system in order to achieve better performance. This paper provides simulation results of Neural Network PID controller for Pressure Process using MATLAB and LabVIEW. From the simulation, NNPID controller has many advantages compared to conventional PI controller like less over shoot, more rise time and less settling time.
References


Index Terms

Computer Science

Applied Sciences
**Keywords**
Pressure Control  Pi Controller  Neural Network  Bp Algorithm