

## **270. IMPLEMENTATION OF FUZZY PID CONTROLLER FOR HOPPER TYPE PROCESS**

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In this paper, optimal PID controller for non-linear Hopper type tank system using LabView is implemented. In Hopper type tank system area as well as height varies hence it is difficult to develop a single mathematical model for the entire system. Hence we have proposed different operating regions to design an appropriate controller using LabView. The performance of the controller is assessed by various parameters such as ISE, IAE, ITSE and ITAE. The Fuzzy logic controller along with PID controller is applied to Hopper type tank level control system. This paper comprises the response of PID, Fuzzy, Fuzzy-PID controllers. From the simulation results it is found that Fuzzy-PID controller gives better performance than the other controllers for hopper type tank system.

Keywords—Controller, Fuzzy systems, Hopper process, Fuzzy- PID Controller, Proportional Integral Derivative (PID).

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