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A Comparison of PID Controller Tuning Techniques | Process ...

Beyond optimization methods, analytical/classical PI/PID controllers tuning techniques (Cohen-Coon, Hallman, Internal Model Control (IMC), Chien-Hrones-Reswick (CHR), and Integral of Absolute Error (ITAE)) were also introduced to do this parameterization. In order to compare the simulated and experimental results, non-intrusive performance indexes based on integral errors (IAE, ISE, ITAE and ITSE) were introduced to evaluate and choose the best performance.

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The results of PID tuning using Ziegler the values of K_p , K_i and K_d acc. to Ziegler $K_p = 9.65$ $K_i = 1.2195$ $K_d = 0.205$ Figure 5. Step Response of Ziegler D. Ziegler Nichols Second Method The results of PID tuning using Ziegler Here the values of K_p , K_i and K_d $K_p = 9.6585$ $K_i = 1.666$ $K_d = 0.15$ Figure 6. Step Response of Ziegler

1 COMPARISON OF TUNING METHODS OF PID CONTROLLER USING ...

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A Comparison And Evaluation of common Pid Tuning Methods

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