Abstract

PID controller is a conventional controller which uses the advantages of Proportional, derivative and Integral controllers for achieving satisfactory results. PID controller gives better results in the system response, like less overshoot, reduced settling time, less steady state error etc even for nonlinear processes, when perfectly tuned. To achieve more stability for the system, a lead compensator can also be added. Stability Boundary Locus method, a graphical method, is used for tuning the controller parameters, Kp, Ki and Kd. This technique includes less mathematical calculations. The stability of the system can be analyzed very easily with the Stability Boundary plot and Bode Plot analysis.

References

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**Index Terms**

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