

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 3, December 2023

Speed Control of DC Motor – A Review

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Abstract: This paper aims to provide an overview of the work of the various tuning controls to control the speed of a DC motor. A DC motor is widely used in the industry, even as the cost of maintenance is higher than that of an induction motor. DC-motor-speed-control, it has attracted a lot of research and several methods have been developed. All of the controllers have been widely used in many fields, such as process control, manufacturing, automation, automotive industry, etc. The soft-computing configuration is quite complex, than that of a conventional controller for controlling the speed of a DC motor. The setting of the CONTROLLER parameters is important, because these parameters have a great influence on the stability and the performance of the system.

Keywords: Proportional Integral Controller, PID Controller, Ziegler-Nichols, Neural Network Controller, fuzzy logic controller, Linear Quadratic Regulator (LQR) Technique

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Volume 3, Issue 3, December 2023

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