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Speed Control of Motor by PI and PID

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Abstract: The extensive use of DC drives in recent years has been facilitated by the quick expansion of the industrial sector. Because DC drives provide better performance, dependability, flexible speed control, etc., conventional industrial drives heavily rely on them. Since speed regulation systems have a major influence on the efficiency of DC drives, DC motor speed modulation is crucial in many industrial settings. In essence, the controller is essential for directing control in both dynamic and transitory situations. This study introduces a chopper that employs PI and PID control to reach the required speed while supplying the armature with an unequal voltage. These controllers increased drive efficiency by removing delay and providing faster control. The comparative analysis of PI PID controllers is clarified in this research. MATLAB is used to study and model effective drive speed control

Keywords: PI PID

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