Abstract

Iterative Learning Control (ILC) has recently much attention for system, where reference commands are periodic signal that work in the repetitive mode. In this work, implementation of ILC for the speed control DC motor system is carried out. The second order transfer function
model for DC motor system is derived and identified. The major key factors such as learning filter and robustness filter in the ILC are designed based on the model parameters of the DC motor system. Simulation tests are executed in the DC motor system with ILC and conventional PID controller. The superiority of ILC is estimated by means of tracking error. The simulation results reveal the efficiency of the ILC.

References

- Roel Merry., Rene van de Mol engraff and Maarten Steinbach., The Influence of Disturbances in Iterative Learning Control. IEEE conference on control application, Toronto, Canada. pp 974-979.

Index Terms

- Computer Science
- Electrical And Instrumentation Engineering

Keywords
Application of Iterative Learning Control Strategy for SISO Process

Dc Motor System  Ilcs  Pid  Root Locus Technique.