A Study of the Mixed Fuzzy PID Controller in the Accurate Orientation

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ABSTRACT

The door-style crane plays an important role in the construction of hydroelectric station. At the same time, it has high degree of difficulty. This paper analyzes the control system of the accurate orientation of the door-style crane, and put forward that the fuzzy PID structure composed of the common integral controller and the double dimension fuzzy controller. In order to test and verify the validity of the fuzzy control strategy and the feasibility of the fuzzy controller, this paper set up the math model about the real system, and use MATLAB and SIMULINK situation simulate tools to group the frame chart of the fuzzy control system, completes the design and simulation of the whole system, gives out the computer simulate result.

Keywords: fuzzy controller position error transfer function Laplace converts