

Impact of pH of Water on Washing Time in Automatic Washing Machine

Abstract

The pH of water is different in different areas. So, the washing machines which are based on Fuzzy Logic Controller being used in different areas are deprived of useful results because these machines cannot detect the pH of water. When pH of water is other than 7, more detergent and washing time for laundry is consumed. The proposition of the paper is that neutral water (pH = 7) should be used in washing machines. It will reduce the washing time. In this way, energy and washing time can be saved. The impersonate results and the action of the aforementioned device have been done by fuzzy logic toolbox using MATLAB.

Keywords: *pH of water, automatic washing machine, MATLAB, fuzzy interface system, fuzzy logic controller (FLC).*