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Presently, companies often require innovative solutions to make their plant operating systems function at peak efficiency. Using latest in equipment technology, resources, and materials. However, complex industrial processes are difficult to control because of inadequate knowledge of their behavior. This lack of knowledge is principally a lack of structural detail and it is this, which prevents the use of conventional control theory. However, a human operator who makes decisions based on inexact and linguistic measures of the process state often controls these processes with great skill. Fuzzy logic is considered as a superset of standard logic, which is extended to deal with the partial truth. It has become one of the most successful technologies for developing complex control systems. Fuzzy logic is a logic that describes fuzziness. As fuzzy logic attempts to model humans' sense of words, decision-making and common sense, it is leading to more human intelligent machines. Therefore, it reflects how people think and attempts to model the sense of words and decisions. As a result, it is leading to new, more human, intelligent systems. Therefore, to improve control system reliability and availability, we implemented all solutions by creating a supervisory system, and we applicate different steps to ensure a fuzzy control of the system. The main objective of these solutions is to improve the old system. The solutions given are divided into two types. The first is a material solution and we proposed a feedback circuit implemented in each section with solenoid valves to automate the system. In addition, we proposed some equipment needed to implement the application. The second one is a software solution in where fuzzy logic has been used as a technique to control the milk production process. The augmented productivity in the factory, minimum downtime, reduced costs of maintenance are improved the advantages of our solutions.

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