OPERABILITY STUDY OF DECISION TABLES IN A CHEMICAL PLANT USING HIERARCHICAL GENETIC FUZZY CONTROL ALGORITHM

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In chemical plants the main components of information are stored in the form of decision tables. In the functioning of the decision tables, the output states are largely dependent on the internal states. The internal states, in general, in most of the chemical plants are too many and some of them are not compatible enough to give a proper output, resulting in loss of time, engineering cost and damage to the very system. To overcome these problems we use hierarchical genetic fuzzy control algorithms. Operability study is a method to study the decision tables in a chemical plant. This method examines the safety of chemical plants by systematically identifying every conceivable process deviations and it can reduce the time and the engineering. The tools for the operability study are guidewords, property words and decision tables. Decision tables are a main concern in this operability study because the decision tables given property words and guide words. Component information is stored in the form of decision tables. We describe HGFCA method by the use of genetic algorithms to decision tables of operability study. By using HGFCA, we improve the system performance with minimal valid conditions in decision tables.

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