

Process Targeting Of Multi-Characteristic Product Using Fuzzy Logic And Genetic Algorithm With An Interval Based Taguchi Cost Function

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Summary

In this paper, a fuzzy based process targeting model is developed for a product with multi-characteristic. It is assumed that the desired quality characteristics cannot be measured directly and has to be calculated indirectly from multi-input process parameters. A fuzzy relation between observed/input parameters and required/output characteristics is proposed. A genetic algorithm is developed to obtain optimal process targets. The utility of the proposed model and algorithm is illustrated by a realistic example.

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