

عنوان مقاله:

Implementation of fuzzy rule-based algorithms in p control chart to improve the performance of statistical process control

محل انتشار:

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خلاصه مقاله:

In the statistical process control when the process is very sensitive and control limit shifts are the prime concerns, there fuzzy control charts can be a better solution. In decision making, extra "rather in control" and "rather out of control" decisions facilitate to find out the slight changes in the control chart. The automation of fuzzy control chart in the Excel VBA makes the data input and decisions making process faster. The vagueness of the data is removed as the charts deal with the triangular or trapezoidal area rather than some points in the control limits. Alongside the fuzzy control charts, Marcucci approach has been followed to find out the goodness-of-fit of the samples and to find out the effectiveness of fuzzy control charts.

کلمات کلیدی:

Fuzzy control charts, control limits, Excel VBA, Marcucci approach, goodness-of-fit

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