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# Evaluation of Nonnormal Process Capability Indices using Generalized Lambda Distribution

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GLD can assume a wide variety of curve shapes and hence it is very useful for the representation of data when the underlying model is unknown. Compared to the Pearson and Johnson family of distributions, the GLD is computationally simpler and more flexible. The article provides all necessary formulas for fitting a GLD curve, estimating its parameters, performing goodness-of-fit tests, and computing generalized PCIs. An example is used to illustrate the calculations that can be easily performed using spreadsheets.

Keywords:

generalized process capability indices

generalized lambda distribution

nonconformance

goodness-of-fit

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