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Evaluation of Nonnormal Process Capability Indices using Generalized Lambda Distribution

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Abstract

Process capability indices (PCIs) are used to express the ability of a process to produce products to specification. The normal distribution is commonly used to model process data, but in many cases, the data are nonnormal. In such cases, the normal distribution can lead to misleading results. The generalized lambda distribution (GLD) can be used to model nonnormal data. The GLD can assume a wide variety of curve shapes and hence it is very useful for the

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Keywords: generalized process capability indices, generalized lambda distribution, nonconformance, goodness-of-fit

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