

Bayesian Economic Cost Plans I. Comparison to Classical Plans

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Abstract: The primary focus of this work is to specify the basic parameters in terms of prior distributions and finding the appropriate conditional posterior distributions to affect the transformation. The principle parameters include the upper and lower limit for the process's quality characteristic X , its mean μ , and the standard deviation, the materials fraction defective p , the sample size n , and the lot size N . The Bayesian model's posterior distributions are derived using known priors as functions of these parameters.

Keywords: Bayesian, cost model, comparison, lot size, fraction defective

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