

## **A Comparison between Empirical and Theoretical OC Curves Related to Acceptance Sampling for Attributes**

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**Abstract :** Many companies use the technique named as acceptance sampling which consists on the inspection and decision making regarding products. According to the results derived from this method, the company takes the decision of acceptance or rejection of a product. The acceptance sampling can be applied to the technology management, since the acceptance sampling can be seen as a tool to improve the design planning, operation and control of technological products. The theoretical operating characteristic (OC) curves are widely used when dealing with acceptance sampling. In this paper, we carry out Monte Carlo simulation studies to compare numerically the empirical OC curves derived from the empirical results to the customary theoretical OC curves. We analyze various possible scenarios in such a way that the differences between the empirical and theoretical curves can be observed under different situations.

**Keywords :** single-sampling plan, lot, Monte Carlo simulation, quality control

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