HYPOTHESIS TESTING INSTEAD OF ACCEPTANCE SAMPLING

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SUMMARY

Hypothesis testing is a logical complete structure to decision-making about population parameters based on sample observations. Hypothesis testing can be applied in all areas of research where theory can be tested against observations. Acceptance sampling is a procedure that is usually applied to a series of lots resulting in a specified risk of accepting lots having a given quality. This paper deals with the application of hypothesis testing instead of acceptance sampling. It is observed that hypothesis testing has a greater advantage compared to acceptance sampling in Statistical quality control. It is also observed that the probability of acceptance calculated using hypergeometric, binomial, and Poisson probability distributions are similar.

Keywords and phrases: Acceptance sampling, hypothesis testing, hypergeometric distribution, binomial distribution, Poisson distribution.