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DESIGN AND EVALUATION OF QUICK SWITCHING SYSTEM WITH SINGLE SAMPLING PLAN AS REFERENCE PLAN UNDER THE CONDITIONS OF INTERVENED POISSON DISTRIBUTION

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ABSTRACT

Acceptance sampling plans are designed to state the sample sizes for inspection to determine the quality of any product. A combination of acceptance sampling plans with switching rules for changing from one plan to another are called acceptance sampling schemes. The basic and most widely used sampling scheme is quick switching system (QSS-1). The key objective of this article is to propose a methodology for selection of parameters of QSS-1 with single sampling plan (SSP) as reference plan when the number of defects follows Intervened Poisson distribution (IPD). Further, numerical illustrations are stated to describe the determination of QSS-1 with single sampling plan as reference plan under the conditions of Intervened Poisson distribution (IPD).

KEYWORDS: Acceptance Sampling Plan, Acceptance Sampling Schemes, Quick Switching System, Single Sampling Plan, Intervened Poisson Distribution

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