International Journal of Statistics and Management System, 2009, Vol. 4, No. 1–2, pp. 134–149. © 2009 Serials Publications

Construction and comparison of mixed sampling plans having ChSP-(0,1) plan as attribute plan^{*}

 $R.Radhakrishnan^{\dagger}and R. Sampath Kumar^{\ddagger}$

Abstract

This paper presents the procedure for constructing the mixed sampling plan using MAPD as a quality standard and MAAOQ as a measure for outgoing quality. Having the ChSP–(0,1) plan as attribute plan, a procedure for the construction of the plans in four different sets of criteria: given (i) MAPD, (ii) AQL, (iii) MAPD and MAAOQ, and (iv) MAPD and AOQL, are discussed. The plan indexed through MAPD is compared with the plan indexed through AQL. The plan indexed through MAPD and MAAOQ and MAAOQ is compared with the plan indexed through MAPD and AOQL. Tables are constructed for easy selection of the plan.

^{*}Received: February 19, 2007; Accepted: September 10, 2008.

Key words and phrases: chain sampling plans, operating characteristic, Poisson distribution, slope, tangent intercept.

[†]*Mailing Address:* PSG College of Arts & Science, Coimbatore-641 014, India. *E-mail:* rkrishnan_cbe@yahoo.com

[‡]Mailing Address: Sri Krishna Arts and Science College, Coimbatore-641 008. *E-mail:* rsampath69@yahoo.com