Abstract

A mixed repetitive sampling plan based on exponentially weighted moving average (EWMA) is proposed in this research, which is more efficient. It is simple and straightforward. This plan is applicable to the inspection of the product whose lifetime follows normal distribution. The plan parameters of the proposed mixed plan are determined by satisfying the given producer's risk and consumer risk at the same time for the specified acceptable quality level and limiting quality level. The plan parameters are determined when the standard deviation is unknown or known. The comparison of proposed plan is made with existing sampling plan. The proposed plan is better than existing plans in terms of average sample number.