ABSTRACT

The acceptance sampling plan plays an important role in maintaining of the quality. It applies statistics to specify that how many measurements are accepted or rejected. A good acceptance-sampling plan not only reduces the cost of construction inspection, but also increases the accuracy of accepted decisions. In this research a procedure is defined on machine just on time or on line, which tells us whether the machine is producing the product according to the specification limits or not. Focusing on acceptance sampling plan we worked on single sampling plans and found the following results on (1) The operating characteristic (OC) curve, (2) the average outgoing quality (AOQ) curve, (3) the average sample number (ASN) curve, (4) the average total inspection (ATI) curve, (5) the average outgoing quality limit (AOQL), (6) the acceptance quality level (AQL) and lot percent defective (LTPD) at ($P_{0.95}$, $P_{0.10}$). Using the hyper geometric distributions, we find all these information for single sampling plan. We also define a chart to check whether machine is producing the product according to the specification limit or not. We also find the percentage of defective in incoming lot.

Presently the company is working properly and its manufacturing product is according to the specification limit. The demand of WAPDA is 2.5% acceptance quality level (AQL) but Syed Bhais is providing on 0.65% AQL.