ECONOMICS

Advanced Edit

For a manufacturing organization to compete effectively in the global marketplace, cutting costs and improving overall efficiency is essential. ~~In this paper,~~ we present a single-stage production system with two independent quality characteristics, ~~and~~each having a different associated cost~~s associated with each quality characteristic. that~~This associated cost falls below a lower specification limit (scrap) or above an upper specification limit (rework) ~~is presented in this paper~~. The ~~amount~~number of reworks and the number of scraps are assumed to be depend~~ent~~ing on ~~the~~ process parameters such as process mean and SD. ~~t~~Thus, the expected total profit is significantly dependent on the process parameters. In ~~T~~this paper, we develop~~s~~ a ~~m~~Markovian decision-making model ~~for~~to determin~~e~~ing the process means. We perform a S~~s~~ensitivity analysis~~es is performed~~ to validate the proposed model, and present a numerical example ~~is given~~as an illustration. The results show~~ed~~ that the optimal process means has ~~a~~ major effects on the parameters of the quality characteristics.

Comment [A1]: I have separated this sentence into two to improve readability and clarity.

Comment [A2]: Is my insertion apt?

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