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Categorization Process of Products to be Used in Remanufacturing

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Abstract: Remanufacturing processes face uncertainty in the quality of the products being returned by customers, this significant variability complicates the control of inventories. We consider necessary differentiate the repair process with the remanufacturing process. The first is dedicated only to repair the damage or defect of the product, on the other hand, remanufacturing provides analyze all components of the product whether or not defective and its main objective is to return to normal operating conditions, meeting quality standards and in addition to aid decision-making in the elimination of fewer components thus helping to reduce costs. If a process of categorizing is performed using the quality characteristics, this will help the remanufacturing process and also reduce the costs of inspection, dispose and inventory. The methodology will be based on Bayesian analysis and Markov Chain Monte Carlo simulations. This article is based on a hybrid system from a plant dedicated to printing products.

Keywords: Remanufacturing, Bayesian Analysis