Exploring Beneficial of Mahalanobis Taguchi Method on Production Environment

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ABSTRACT

The Mahalanobis—Taguchi system (MTS) is a relatively new collection of methods proposed for diagnosis and forecasting using multivariate data and Mahalanobis distance (MD) scale used to measure the level of abnormality of "abnormal" items compared to a group of "normal" items. By forecasting a lot of waste product will be reduce. The aim of this work is to propose a new method capable to reduce a lot of waste product especially in production environment. From this work, MTS will be used to diagnose the rejecting parameter on electronics component. As a result, MTS can be used to identify the unhealthy activities on a group and can recognized the important of reducing a lot of waste product from rejected types of inductor component to solve any issue related to forecast and unused capacity in production environment.

KEYWORDS: Mahalanobis Taguchi System, Mahalanobis distance, healthy and unhealthy group

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