Proposing of Mahalanobis-Taguchi System and Time-Driven Activity-Based Costing on Magnetic Component of Electrical & Electronic Industry

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ABSTRACT

In the complex and dynamic environment today, it is very important for Electrical & Electronic (E&E) industry to know the better quality and profitability of magnetic component. The objective of this work is proposing of Mahalanobis-Taguchi System (MTS) and Time-Driven Activity-Based Costing (TDABC) on production of E&E industry. In general, MTS is used to evaluates the parameters in workstation either critical or non-critical parameter while TDABC requires estimate two key parameters: (1) develop time equation to determine the estimated time for each activity and (2) calculate capacity cost rate of each sub-activity. Furthermore, based on collecting the data for a workstation visual mechanical inspection, MTS can identify the diagnosis parameters while TDABC can measure the unused capacity in term of resources and time for each process in a workstation. Eventually, MTS found that Mahalanobis Distance (MD), 7 and TDABC predicted MYR62659.55.

KEYWORDS:

Diagnosis; Mahalanobis-Taguchi System; Time-Driven Activity-Based Costing

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