World Academy of Science, Engineering and Technology
International Journal of Industrial and Manufacturing Engineering
Vol:8, No:03, 2014

Evaluating the Cost of Quality: A Case Study of a South African Foundry Business

Authors : Chipo Mugova, Zuko Mjobo

Abstract : The aim of this study was to evaluate the cost of quality (COQ) at a local foundry business to identify the contribution of its units and processes to quality costs within the foundry's operations. The foundry selected for detailed case study is one of major businesses that have been targeted by the government to produce components for building and re-furbishing wagons and trains. The study aimed at identifying areas in the foundry's processes in which investment needs to be made to reduce quality costs. This is in alignment with government's vision of promoting local business to support local markets leading to creation of jobs, and hence reduction of unemployment rate in South Africa. The methodology adopted used cost of quality models. Results from the study indicated that internal failure costs were significantly higher than all other cost of quality categories, taking more than 60% of the business's income.

Keywords : appraisal costs, cost of quality, failure costs, local content, prevention costs
Conference Title : ICAIME 2014 : International Conference on Advances in Industrial and Manufacturing Engineering
Conference Location : Miami, United States
Conference Dates : March 10-11, 2014