

Process improvement on manufacturing floor through PDCA methodology

Abstract

Many organizations are struggling to improve customer-focused quality in today's highly competitive domestic and global markets. At the same time, these organizations have failed to implement the PDCA methodology into their daily control and strategic planning processes. Therefore the purpose of this thesis is to solve the bucket backhoe waste problem from cutting process by using Plan-Do-Check-Act methodology P-D-C-A. The current situation due had contributed by increased quantity of waste from thus process. Project objectives were set in Plan phase to identify the waste and the product defect. The baseline data was collected from different process in the Do phase to identify the current possible causes from machine, man, material and method factor that effect to the product. In Check phase, results will justify the relationship of vital few causes to the bucket backhoe process, which led to the waste. In Act phase, the solution was chosen to reduce the waste and improve the performance of process by considering factors such as performance, efficiency and cost. Analyze and suggestion some design concepts were carried out to determine the best solution or options on the acetylene Oxy cutting process and implementation checklist to control and provide a guideline to assist worker and equipment as to minimize the waste and defect or any problem occur that required to review for acetylene Oxy cutting process Beside that improved were institutionalized with proper training, documentation, and provide handbook as a guideline reference. The result from the project has provided an actual successful deployment of Plan-Do-Check-Act methodology PDCA with application of design a new apparatus, several of statistical tools and techniques like pareto diagram and fish bone diagram, as the systematic problem solving framework on solving other process issues..

Keywords: PDCA Technique; Identify; Solve the Problem.