

Six sigma approach to improve stripping quality of automotive electronics component - A case study

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ABSTRACT

Lacking of problem solving skill techniques and cooperation between support groups are the two obstacles that always been faced in actual production line. Inadequate detail analysis and inappropriate technique in solving the problem may cause the repeating issues which may give impact to the organization performance. This study utilizes a well-structured six sigma DMAIC with combination of other problem solving tools to solve product quality problem in manufacturing of automotive electronics component. The study is concentrated at the stripping process, a critical process steps with highest rejection rate that contribute to the scrap and rework performance. The detail analysis is conducted in the analysis phase to identify the actual root cause of the problem. Then several improvement activities are implemented and the results show that the rejection rate due to stripping defect decrease tremendously and the process capability index improved from 0.75 to 1.67. This results prove that the six sigma approach used to tackle the quality problem is substantially effective.

KEYWORDS:

Process engineering; Process monitoring; Quality control; Six sigma; Work simplification