Particular model for improving failure mode and effect analysis (FMEA) by using of overall equipment efficiency (OEE)

ABSTRACT

Almost all of factories use failure mode and effect analysis (FMEA) technique to reduced risk priority number (RPN). This paper proposes a new model to reduce RPN by improving overall equipment efficiency (OEE) by using of heuristic mathematic model based on total productive maintenance index. Three factors are considered: (i) probability of failure (Occurrence), (ii) severity and (iii) distinction. A textile industry is used as a test case that produces some product for seat cover. It was shown that the RPN decreased in FMEA.