

Cost Modeling for ABC Failure of Machines

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In this paper we analyze Weibull generated failures of equipment in discrete production. At first we will classify failures using ABC analysis. Obtained characteristics of each group of failures can be used to generate time of their occurrence and duration which are essential for assessment of their cost. We use optimization tool Solver from MS Office – Excel to solve problem of maintenance of machines. We optimize strategy of maintenance also according to cost of failures in categories ABC classification. Results of this optimization are tables, graphs, having that it can offer to managers a new unconventional access at the efficiency of investment. We create the proposed approach of solving models on demonstration example.

Keywords: Linear Programming Tasks, Cost of Failures, Weibull Distribution of Failures, Optimization Problems

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